APC-3X92X Panel PC
User Manual

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Warning!

This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions manual, it may cause interference to radio communications.
It has been tested and found to comply with the limits for a Class A computing device pursuant to FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

Electric Shock Hazard – Do not operate the machine with its back cover removed. There are dangerous high voltages inside.

Disclaimer

This information in this document is subject to change without notice. In no event shall Aplex Technology Inc. be liable for damages of any kind, whether incidental or consequential, arising from either the use or misuse of information in this document or in any related materials.

Packing List

Accessories (as ticked) included in this package are:
☐ AC power cable ☐ Driver & manual CD disc ☐ Other._____(please specify)

Safety Precautions

Follow the messages below to avoid your systems from damage:

- ◆ Avoid your system from static electricity on all occasions.
- ◆ Prevent electric shock. Don‘t touch any components of this card when the card is power-on. Always disconnect power when the system is not in use.
- ◆ Disconnect power when you change any hardware devices. For instance, when you connect a jumper or install any cards, a surge of power may damage the electronic components or the whole system.

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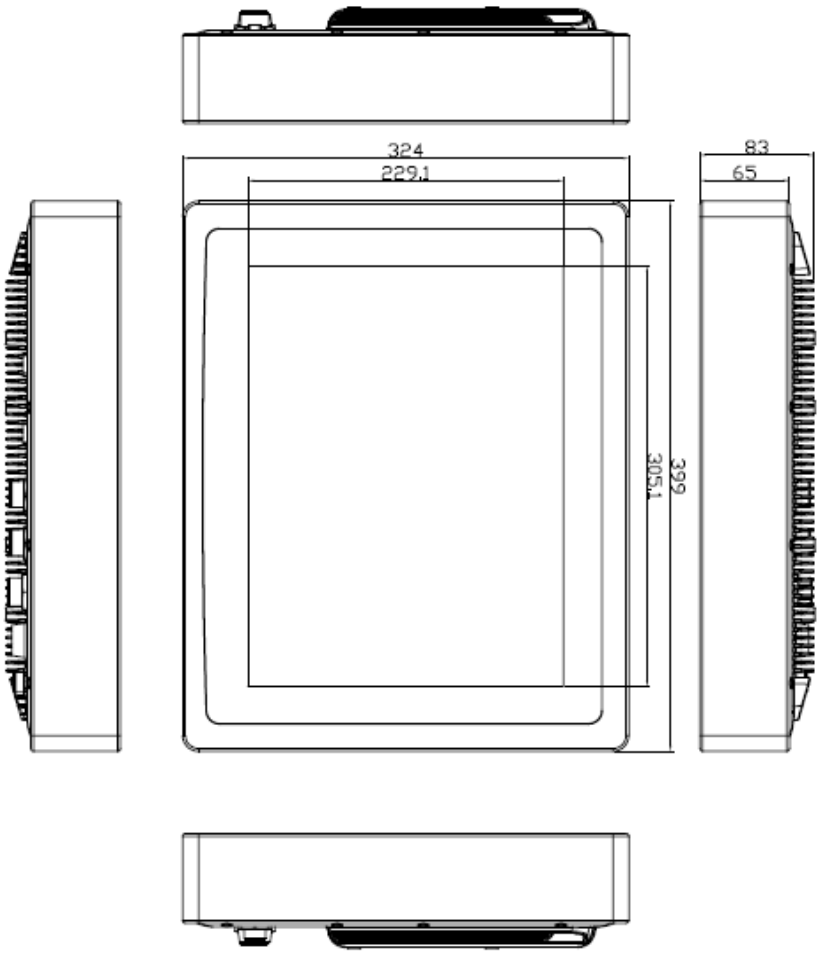
Chapter 1 Getting Started

1.1 Specifications

Model No. / Specs	APC-3592	APC-3592A	APC-3792R	APC-3792P
System				
Processor	Intel Atom Processor D525 1.8GHz built-in	Intel Atom Processor N455 1.66GHz built-in	Intel Atom Processor D525 1.8GHz built-in	Intel Atom Processor N455 1.66GHz built-in
System Chipset	Intel ICH8M Chipset			
System Memory	1 x 204 Pin DDR3 800MHz SO-DIMM socket, default 2GB			
Storage	1 x 2.5” SATA HDD 1 x Internal CF Slot			
External I/O Port	2 x USB 2.0 connectors 1 x RJ-45 LAN connector 1 x DB-9 RS-232 (COM1) 1 x DB-9 RS-232/422/485 (COM3), default RS-485 1 x DC Power input 1 x power button with LED light			
Expansion Slots	None			
OS support	Windows XP Professional, XP Embedded, Windows 7, Windows Embedded Standard 7			
LCD				
Display Type	15” TFT-LCD		17” TFT-LCD	
Max. Resolution	1024x768		1280x1024	
Max. Color	262K		16.7M	
Luminance (cd/m2)	400		350	
View Angle	H:160° / V:145°		H:170° / V:160°	
Backlight Lifetime	50,000 hrs			
Touch Screen				
Type	Projected Capacitive Touch		Overlay Resistive Touch	Projected Capacitive Touch
Light Transmission	90%		80%	90%
Power Supply				

Power Input	11~32V DC			
Mechanical				
Construction	Stainless steel			
IP Rating	IP65	IP65/IP69K	IP65	IP65/IP69K
Mounting	VESA 100x100/200x100 Mount	VESA 75x75 Mount		
Dimensions (WxHxD)	399x324x83	399x324x65	432x358x67.9	432x358x65
Net Weight	7.2kgs	7.1kgs	8.9kgs	8.8kgs
Environmental				
Operating Temperature	-20~60 °C	-20~50 °C	0~50 °C	-20~50 °C
Storage Temperature	-30~70 °C		-20~60 °C	-30~70 °C
Storage Humidity	10~90% @40 ° C non-condensing			
Certificate	CE/FCC Class A			

1.2 Dimensions



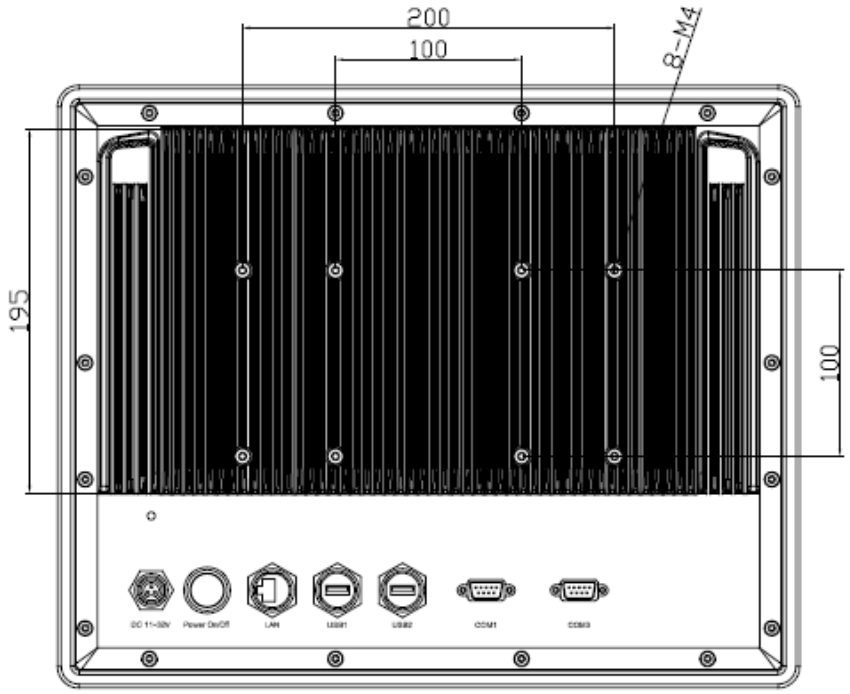
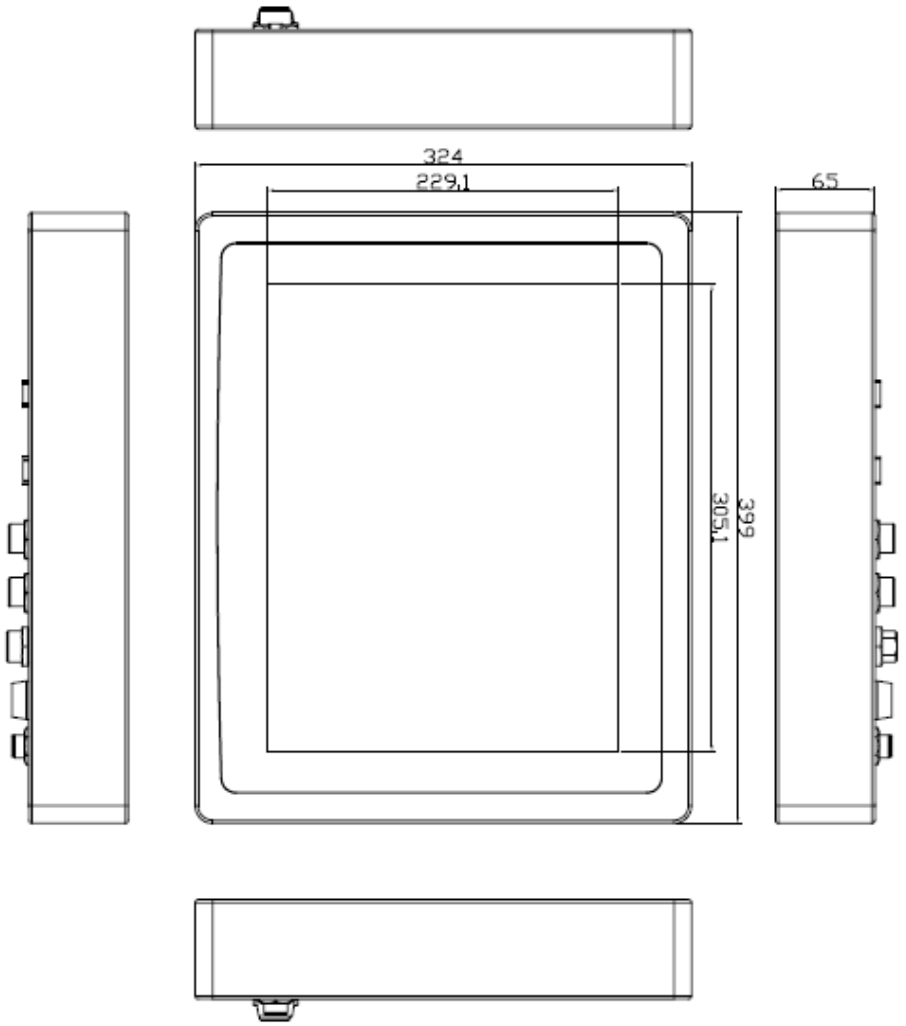


Figure 1.1: Dimensions of APC-3592



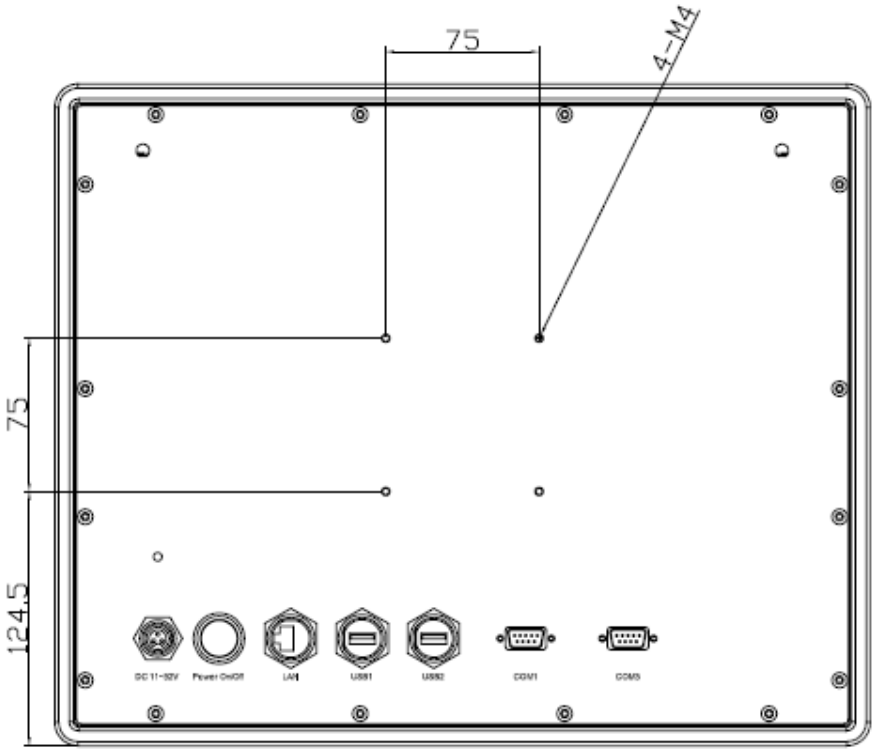
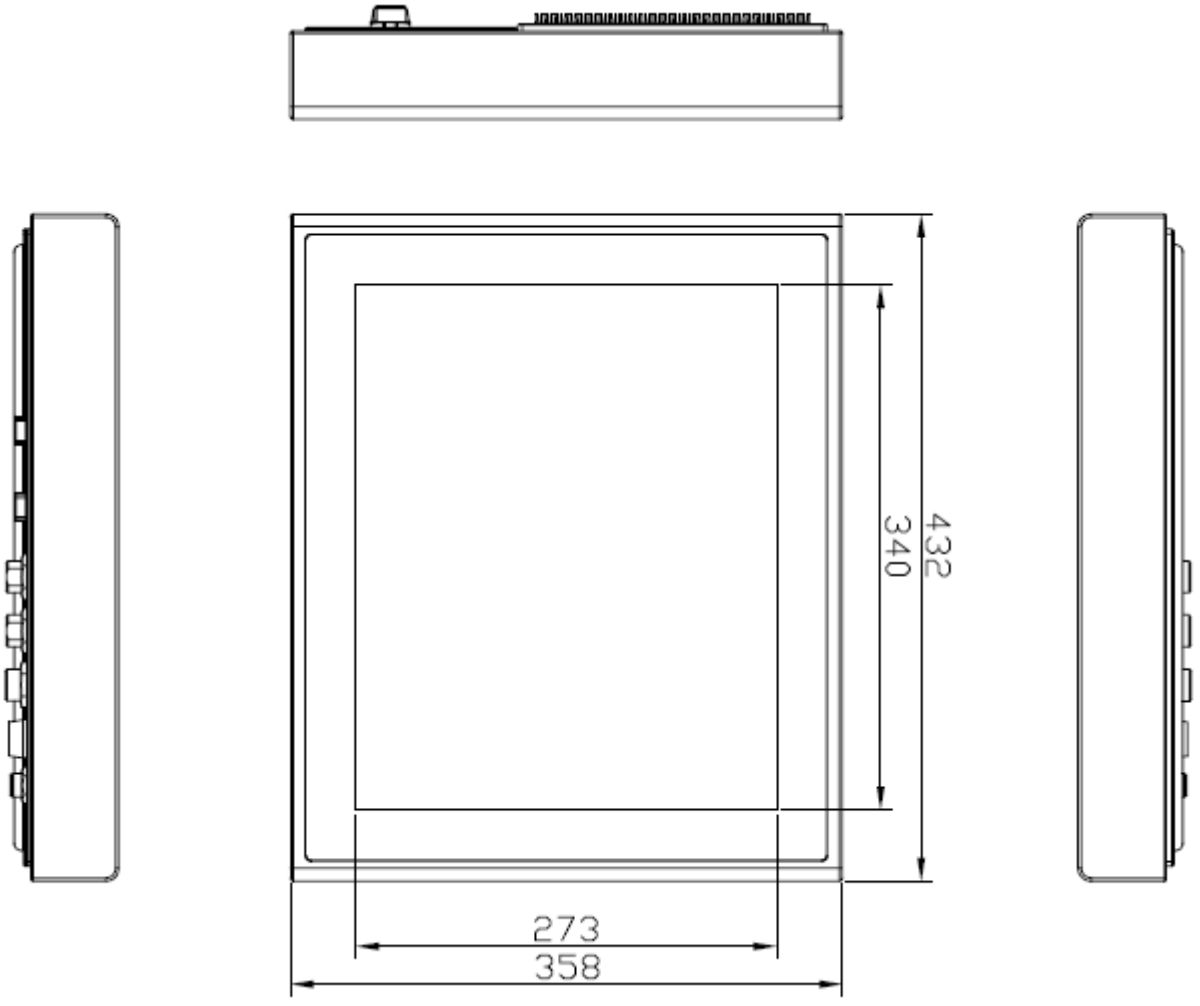


Figure 1.2: Dimensions of APC-3592A



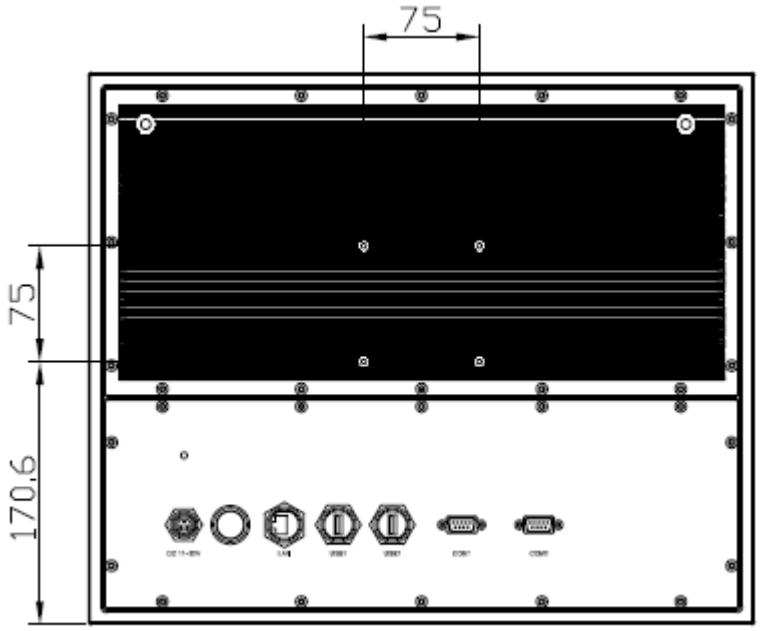
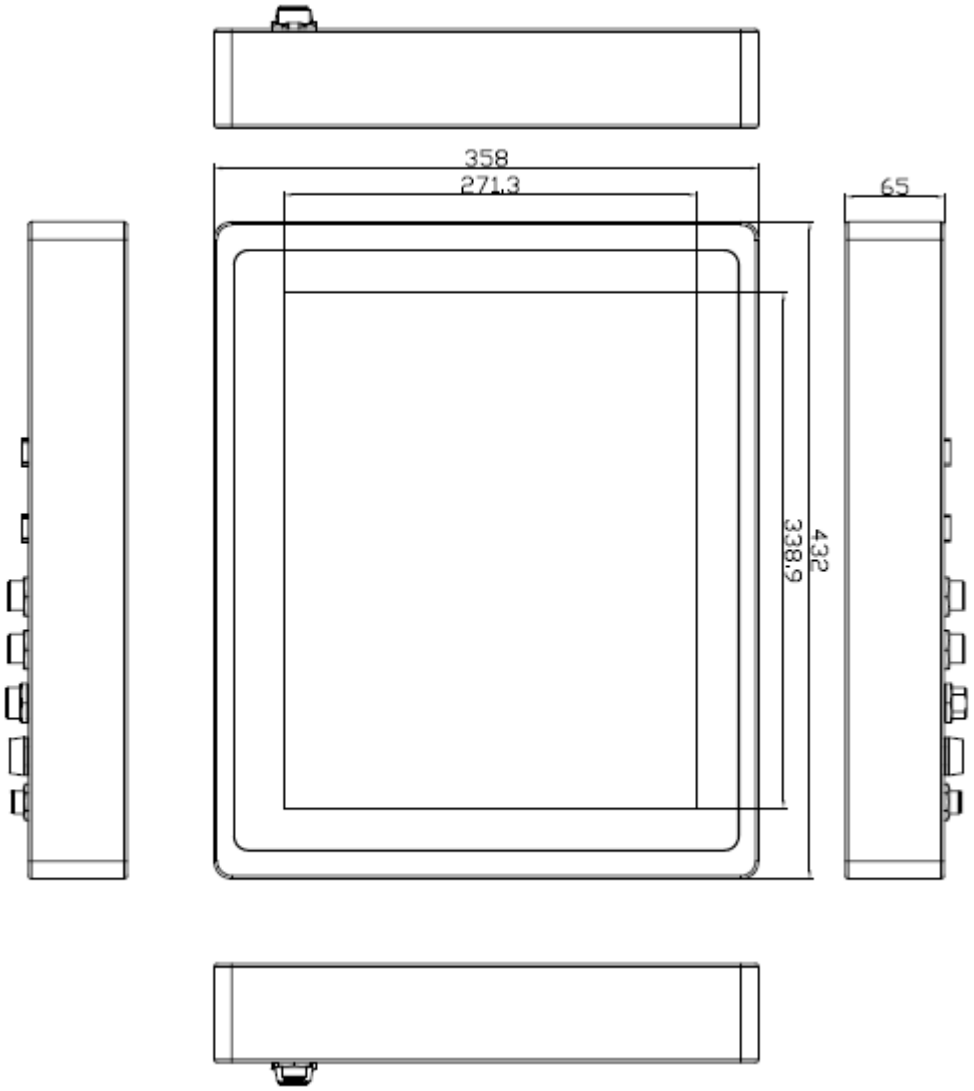


Figure 1.3: Dimensions of APC-3792R



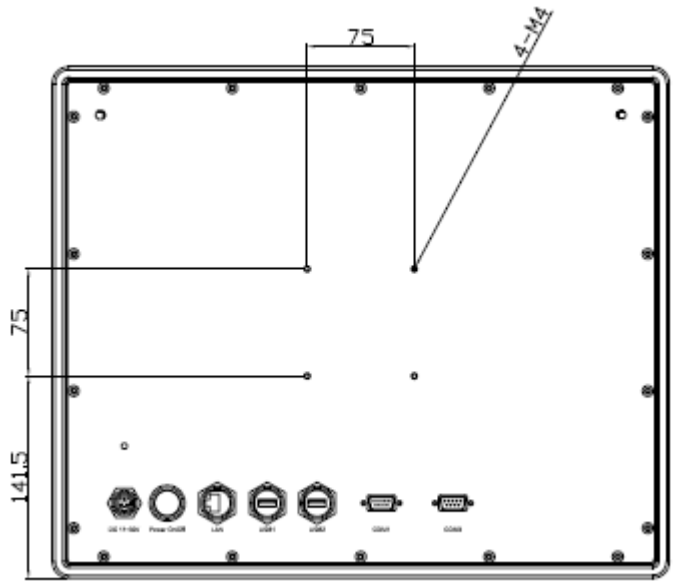


Figure 1.4: Dimensions of APC-3792P

1.3 Brief Description of the APC-3X92X

APC-3X92X is a power-optimized and delivers robust performance-per-watt for embedded Panel PC. The powered by an Atom D525 1.8 GHz processor for APC-3592/3792R and an Atom N455 1.66GHz processor for APC-3592A/3792P. It comes with an internal compact flash slot, 2.5-inch hard disk drive, DDR3 memory, 1 Ethernet, DC input, and 2 USB ports. The unit supports Windows XP Professional, XP Embedded, Windows 7, Windows Embedded Standard 7. The fanless stainless steel Panel PC is ideal for use as industrial automation, factory automation and outdoor.

Figure 1.6: Front View of APC-3592/3592A/3792P

Figure 1.7: Front View of APC-3792R

Figure 1.8: Rear View of APC-3592

Figure 1.9: Rear View of APC-3792R

Figure 1.10: Rear View of APC-3592A/3792P

Chapter 2 Hardware Installation

2.1 Mainboard Specifications

Figure 2.1: Mainboard Overview

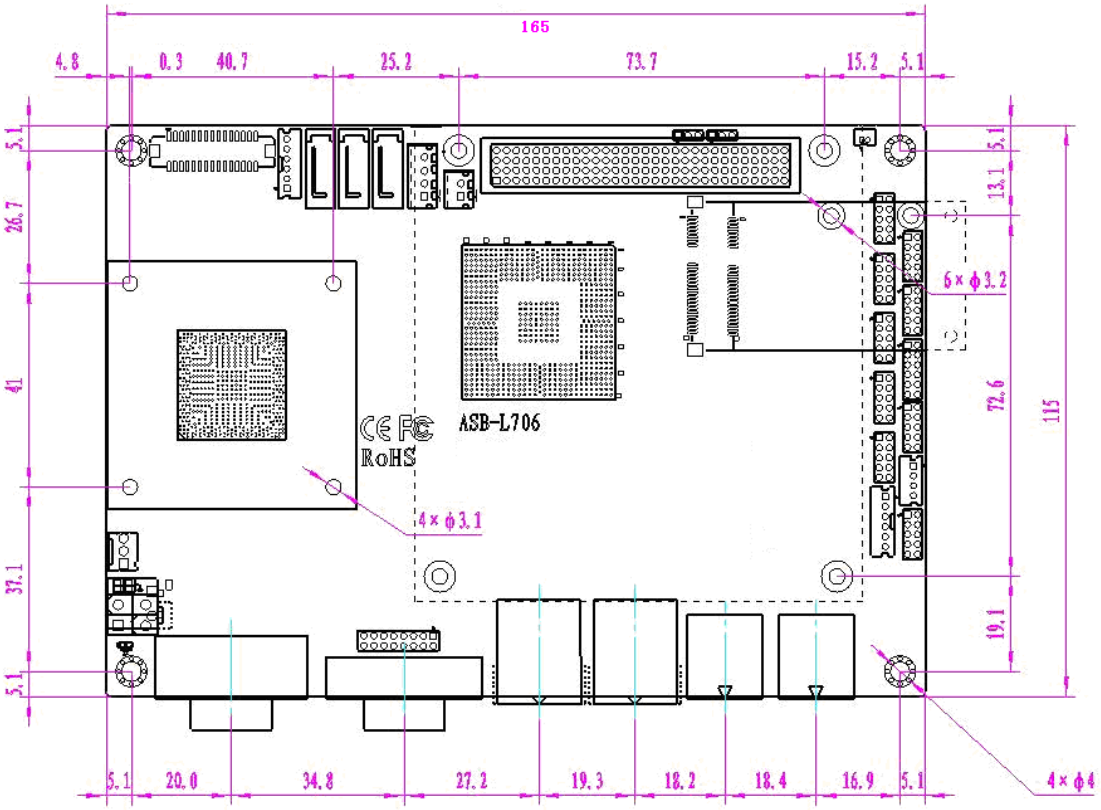


Figure 2.2: Mainboard Dimensions

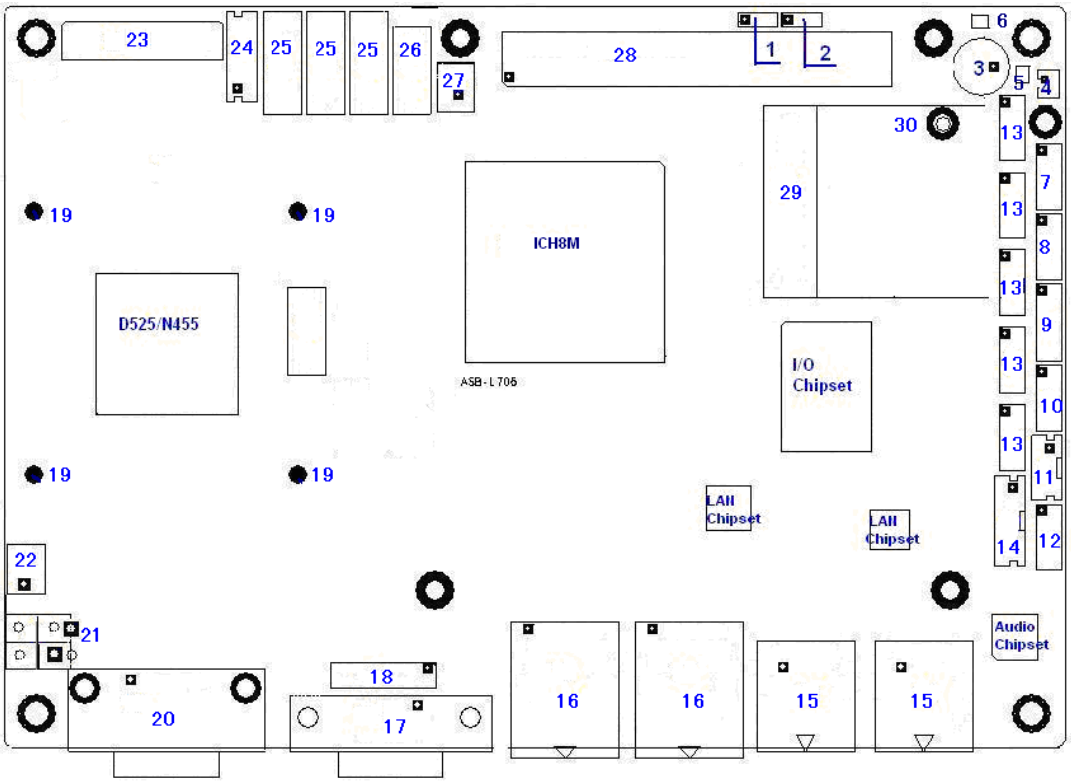


Figure 2.3: Jumpers and Connectors Location-TOP

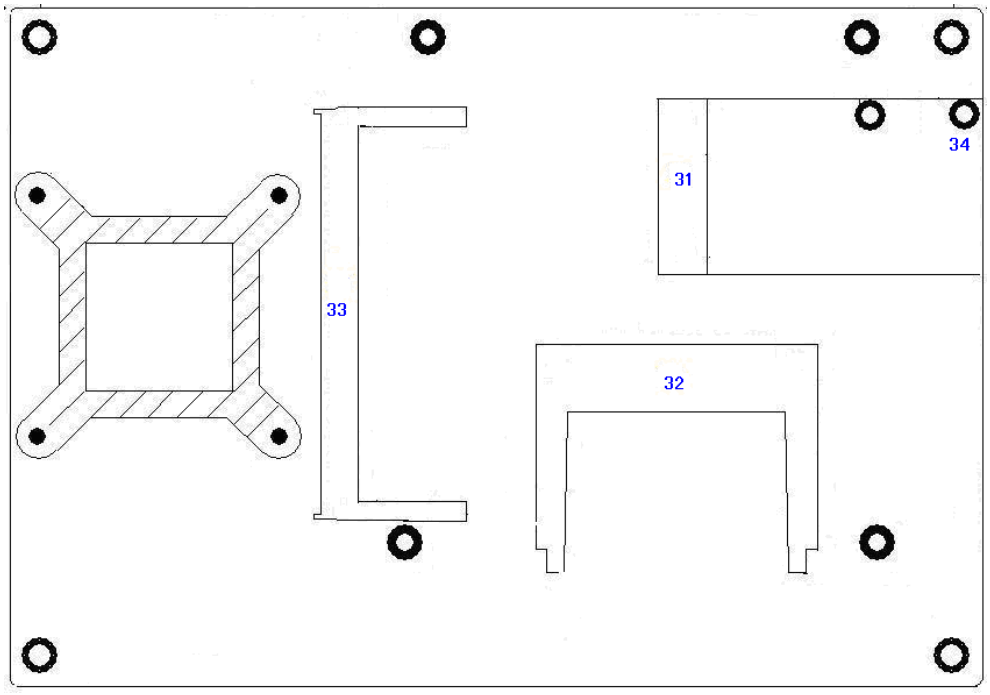


Figure 2.4: Jumpers and Connectors Location- Bottom

Specifications	
Board Size	165mm x 115mm
CPU Support	Intel Atom D525 /1.80GHz (onboard) Intel Atom N455 /1.66GHz (onboard option）
Chipset	Intel Atom D525 + Intel ICH8M Intel Atom N455 + Intel ICH8M (option） Intel Atom N455 + Intel ICH8M-E (option, Support RAID0/1）
Memory Support	1x SO-DIMM (204pins), up to 2GB DDR3 800MHz FSB
Graphics	Integrated by D525 / N455 GMA 3150
Super I/O	Winbond W83627UHG
BIOS	AMIBIOS
Storage	3 x SATA Connector 1 x Compact Flash II Slot (shared IDE)
Network	2 x RJ-45 1000Mbps LAN Intel 82574L
USB	4 x USB 2.0 stack port for external 2 x USB 2.0 internal Pin header 2 x USB 2.0 internal for mini PCIe
Serial	1 x RS232 port, DB9 connector for external (COM1), pin 9 w/5V/12V/Ring select 1 x RS232/422/485 select header for internal (COM3), default RS232 4 x RS232 (COM2,COM4,COM5,COM6), header internal
Digital I/O	8-bit digital I/O by Pin header 4-bit digital Input 4-bit digital Output
Battery	Support CR2477 Li battery by 2-pin header
Audio	Support Audio via Realtek ALC662 HD audio decoder Support Line-in, Line-out, MIC by 2x5-pin header
Keyboard /Mouse	1x PS2 keyboard/mouse by 1x6 box pin header
Expansion Bus	1x PC 104+ connector (PCI master 4, jumper for +3.3V & 5V select) 2x mini-PCI-express slot (1x full size, 1x half-size)
Power	DC12V input

Management	1 x 2-pin power input connector
Front I/O	by 2x5-pin header Power on/off switch Reset switch Power LED status HDD LED status Buzzer
Watchdog Timer	Software programmable 1 – 255 second by Super I/O
External I/O port	1 x COM Port (COM1) 4 x USB 2.0 Ports (stack) 2 x RJ45 GbE Ports (10/100/1000Mbps) 1 x DB15 Port or 2x8 Pin Header
Temperature	Operating: -20℃–70℃ Storage: -40℃–85℃
Humidity	5% - 95%, non-condensing, operating
Power Consumption	12V /1.6A (Intel D525 processor with 2GB DDR3 DRAM) 12V /1.3A (Intel N455 processor with 2GB DDR3 DRAM)
EMI/EMS	Meet CE/FCC class A

2.2 Jumpers Setting and Connectors

1. **JCLR_CMOS:** (2.0mm Pitch 1x3 Pin Header)CMOS clear jumper, CMOS clear operation will permanently reset old BIOS settings to factory defaults.

JCLR_CMOS	CMOS
CLOSE 1-2	NORMAL (default)
CLOSE 2-3	Clear CMOS

Procedures of CMOS clear:

5.4.1.1 Turn off the system and unplug the power cord from the power outlet.

5.4.1.2 To clear the CMOS settings, use the jumper cap to close pins 2 and 3 for about 3 seconds then reinstall the jumper clip back to pins 1 and 2.

5.4.1.3 Power on the system again.

5.4.1.4 When entering the POST screen, press the <F1> or <DEL> key to enter CMOS Setup Utility to load optimal defaults.

5.4.1.5 After the above operations, save changes and exit BIOS Setup.

2. **JVCCIO:** (2.0mm Pitch 1x3 Pin Header) PC104+ port voltage selection jumper,select voltage for PCI-104 Plus device. **The default for this jumper is "all open",meaning the user must select the voltage to be used.**

JVCCIO	PC104+ VCCIO Voltage
CLOSE 1-2	+3.3V
CLOSE 2-3	+5V
all Open	**(Default)**

3. **BZ:** onboard buzzer.

4. **JCOM6:** (2.0mm Pitch 1x3 Pin Header) COM6 setting jumper, pin 1~3 are used to select signal out of pin 10 of COM6 port.

JP1 Pin#	Function
Close 1-2	**COM6 Pin10=+5V (default)**
Close 2-3	COM6 Pin10=+12V (option)

5. **JP2:** (2.0mm Pitch 1X2 Pin Header), ATX Power and Power auto on setting jumper**.**

JP2	Mode
Open	ATX Power Mode

Close	Power Auto on (Default)

6. BAT: (1.25mm Pitch 1x2 box Pin Header) 3.0V Li battery is embedded to provide power for CMOS.

Pin#	Signal Name
Pin1	VBAT
PIN2	Ground

7. F_PANEL: (2.0mm Pitch 2X5 Pin Header), Front panel connector.

Signal Name	Pin#	Pin#	Signal Name
HD LED+	1	2	POWER LED+
HD LED-	3	4	POWER LED-
Ground	5	6	PWRBTN
RESET	7	8	Ground
BUZZER+	9	10	BUZZER-

Pin1-3: **HDD LED**, They are used to connect hard disk activity LED. The LED blinks when the hard disk is reading or writing data.

Pin2-4: **POWER LED**, They are used to connect power LED. When the system is powered on or under S0/S1 state, the LED is normally on; when the system is under S4/S5 state, the LED is off.

Pin5-6: **POWER on/off Button**, They are used to connect power switch button. The two pins are disconnected under normal condition. You may short them temporarily to realize system startup & shutdown or awaken the system from sleep state.

Pin7-8: **RESET Button**, They are used to connect reset button. The two pins are dis-
connected under normal condition. You may short them temporarily to realize
system reset.

Pin9-10: **BUZZER**, They are used to connect an external buzzer.

Note:

When connecting LEDs and buzzer, pay special attention to the signal pola-
rity. Make sure that the connector pins have a one-to-one correspondence with chassis wiring, or it may cause boot up failure.

8. USB3: (2.0mm Pitch 2x5 Pin Header) ,Front USB connector, it provides two USB ports via a dedicated USB cable, speed up to 480Mb/s.

Signal Name	Pin#	Pin#	Signal Name
+5V	1	2	+5V
USB_P6_DN	3	4	USB_P7_DN
USB_P6_DP	5	6	USB_P7_DP
Ground	7	8	Ground
NC	9	10	Ground

Note:

Before connection, make sure that pinout of the USB Cable is in accordance with that of the said tables. Any inconformity may cause system down and even hardware damages.

9. JCOM: (2.0mm Pitch 2x6 Pin Header) COM1 and COM3 setting jumper, pin 1~6 are used to select signal out of pin 9 of COM1 port; pin 7~12 are used to select output type for COM3 port (RS232 Type or RS422 Type or RS485 Type).

JCOM Pin#	Function
CLOSE 1-2	**COM1 Pin9=RI （default）**
CLOSE 3-4	COM1 Pin9=+5V (option)
CLOSE 5-6	COM1 Pin9=+12V (option)
CLOSE 7-9	**COM3 FOR RS232 FROM COM3 （default）**
CLOSE 8-10	COM3 FOR RS485 FROM COM33 (option)
CLOSE 10-12	COM3 FOR RS422 FROM COM33 (option)

Note:

Since COM3 and COM33 use the same address, they cannot work at the same time.

10. GPIO: (2.0mm Pitch 2x5 Pin Header),General-purpose input/output port, it provides a group of self-programming interfaces to customers for flexible use.

Signal Name	Pin#	Pin#	Signal Name
GPIO20	1	2	GPIO60
GPIO21	3	4	GPIO61
GPIO22	5	6	GPIO62
GPIO23	7	8	GPIO63
Ground	9	10	+5V

11. COM33: (2.0mm Pitch 1x4 box Pin Header),it provides selectable RS422/RS485 serial signal output.

RS422 Type (option)		RS485 Type (option)	
Signal Name	Pin#	Pin#	Signal Name
422RXD-	1	1	NC
422RXD+	2	2	NC
422TXD-	3	3	485B-
422TXD+	4	4	485A+

Note:

Use COM3 RS232/RS485 Function, please setting JCOM Jumpers and BIOS CMOS Setup.

Path:

BIOS Setup Utility \ Advanced Setting \ SuperIO Configuration \ Serial Port3 Type:

[RS232 Type]

[RS485 Type]

12. F_AUDIO: (2.0mm Pitch 2x5 Pin Header), Front Audio, An onboard Realtek ALC662 codec is used to provide high-quality audio I/O ports. Line Out can be connected to a headphone or amplifier. Line In is used for the connection of external audio source via a Line in cable. MIC is the port for microphone input audio.

Signal Name	Pin#	Pin#	Signal Name
FRONT-OUT-L	1	2	LINEIN_R
AUD_AGND	3	4	AUD_AGND
FRONT-OUT-R	5	6	LINEIN_L
AUD_AGND	7	8	AUD_AGND

FRONT-MIC_L	9	10	FRONT-MIC_R

13. COM2-COM6: (2.0mm Pitch 2x5 Pin Header),COM2 COM3 COM4 COM5 COM6 Ports, up to 5 standard RS232 ports are provided. They can be used directly via COM cable connection.

COM2,COM3,COM4,COM5 Signal Name:			
Signal Name	Pin#	Pin#	Signal Name
DCD	1	2	RXD
TXD	3	4	DTR
Ground	5	6	DSR
RTS	7	8	CTS
RI	9	10	NC

COM6 Signal Name:			
Signal Name	Pin#	Pin#	Signal Name
DCD	1	2	RXD
TXD	3	4	DTR
Ground	5	6	DSR
RTS	7	8	CTS
RI	9	**10**	**JCOM6 Setting:** Pin1-2 : 5V (Default) Pin2-3:12V (option)

Note:

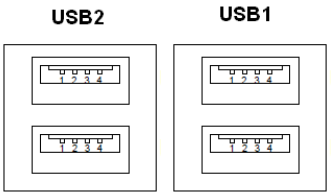
COM3 port is controlled by pins No.7~10 of JCOM. For details, please refer to description of JCOM and COM33 BIOS Setup.

14. KB/MS: (2.0mm Pitch 1x6 box Pin Header), PS/2 keyboard and mouse port, the port can be connected to PS/2 keyboard or mouse via a dedicated cable for direct used.

Pin#	Signal Name
1	KBDATA
2	MSDATA

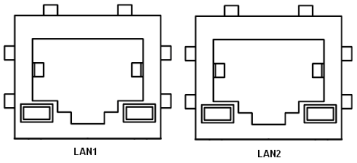
3	Ground
4	+5V
5	KBCLK
6	MSCLK

15. **USB1/2:** (Double stack USB type A), Rear USB connector, it provides up to 4 USB2.0 ports, speed up to 480Mb/s.

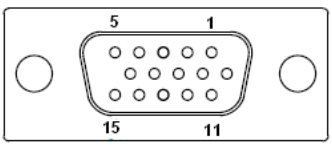


Each USB Type A Receptacle (2 Ports) Current limited value is 1.5A.
If the external USB device current exceeds 1.5A, please separate connectors into different Receptacle.

16. **LAN1/2:** (RJ45 Connector), Rear LAN port,2 standard 10/100/1000M RJ-45 Ethernet ports are provided. Used Intel 82567LM chipset ,LINK LED (green) and ACTIVE LED (yellow) respectively located at the left-hand and right-hand side of the Ethernet port indicate the activity and transmission state of LAN.



17. **VGA:** (CRT Connector DB15),Video Graphic Array Port, provide high-quality video output. **they can not work at the same time for VGA and VGA-PH.**



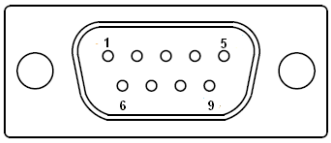
18. **VGA-PH:** (CRT 2.0mm Pitch 2x8 Pin Header), Video Graphic Array Port, Provide 2x8 Pin cable to VGA Port, **they can not work at the same time for VGA and VGA-PH.**

Signal Name	Pin#	Pin#	Signal Name
CRT_RED	1	2	Ground
CRT_GREEN	3	4	Ground
CRT_BLUE	5	6	NC
CRT_R_HSYN	7	8	CRT_PU_DDC_DAT

C			
CRT_R_VSYNC	9	10	CRT_PU_DDC_CLK
NC	11	12	NC
+12V	13	14	Ground
+12V	15	16	Ground

19. CPU SCREW HOLES: Four screw holes for fixed CPU Cooler assemble.

20. COM1: (Type DB9),Rear serial port, standard DB9 serial port is provided to make a direct connection to serial devices. COM1 port is controlled by pins No.1~6 of **JCOM**,select output Signal RI or 5V or 12v, For details, please refer to description of JCOM.



21. AT12V: (5.0mm 1x2 Pin Connector),DC12V System power input connector。

Pin#	Signal Name
1	+12V
2	Ground

Note:

Make sure that the voltage of power supply is DC(12±5%)V before power on, or it may cause boot up failure and even system damage.

22. FAN: (2.54mm Pitch 1x3 Pin Header),Fan connector, cooling fans can be connected directly for use. You may set the rotation condition of cooling fan in menu of BIOS CMOS Setup.

Pin#	Signal Name
1	Ground
2	VCC
3	Rotation detection

Note:

Output power of cooling fan must be limited under 5W.

23. LVDS: For 18 bit LVDS output connector, Fully supported by Intel Atom D525 chipset, the interface features single channel 18-bit output. Model name of the interface connector is Hirose DF13-30DP-1.25V.

Signal Name	Pin#	Pin#	Signal Name
LVDS1_VDD5	1	2	LVDS1_VDD5
Ground	3	4	Ground
LVDS1_VDD33	5	6	LVDS1_VDD33
LADATAN0	7	8	NC
LADATAP0	9	10	NC
LADATAN1	11	12	NC
LADATAP1	13	14	NC
LADATAN2	15	16	NC
LADATAP2	17	18	NC
LACLKN	19	20	NC
LACLKP	21	22	NC
LDDC_CLK	23	24	NC
LBKLT_EN	25	26	BKLT_CTRL
Ground	27	28	Ground
+V12S	29	30	+V12S

24. BKL: (2.0mm Pitch 1x5 box Pin Header), Backlight control connector for LVDS1.

Pin#	Signal Name
1	+DC12V
2	+DC12V
3	Ground
4	Ground
5	BKLT_EN
6	BKLT_CTRL

25. SATA1/2/3: (SATA 7P),SATA1,SATA2,SATA3 SATA Connectors,Three SATA connectors are provided, with transfer speed up to 3.0Gb/s.

ASB-L706NE: SATA1/SATA2/SATA3 drives supporting RAID 0 or RAID 1 function

26. SATA_P2: (2.5mm Pitch 1x4 box Pin Header), onboard 5V and 12V output connector is reserved to provide power for SATA devices.

Pin#	Signal Name

1	+DC5V
2	Ground
3	Ground
4	+DC12V

Note:

Output current of the connector must not be above 1A.

27. CN1: (2.5mm Pitch 1x2 box Pin Header),an onboard 5V output connector is reserved to provide power for IDE/SATA devices.

Pin#	Signal Name
1	+DC5V
2	Ground

Note:

Output current of the connector must not be above 1A.

28. PC104+: (4x30 Pin), PC104 plus connector, it conforms to standard PC104+ specification.

29. MPCIE2: (30mmx30mm Socket 52Pin),mini PCIE socket, it is located at the top, it supports mini PCI-E devices with USB2.0, SMBUS and PCI-E signal.

30. MPCIE2 SCREW HOLES: one screw holes for fixed MPCIE2 assemble.

31. MPCIE: (50.95x30mm socket 52Pin),mini PCIE socket, it is located at the bottom, it supports mini PCI-E devices with USB2.0, SMBUS and PCI-E signal.

32. CF: CF Card socket, it is located at the bottom of the board and serves as an insert interface for Type I and Type II Compact Flash card. The operating voltage of CF card can be set as 3.3V or 5V. **The default setting of the product is 5V.**

33. DDR3: (SO-DIMM 204Pin socket), DDRIII memory socket, the socket is located at the bottom of the board and supports 204Pin 1.5V DDRIII 800MHz FSB SO-DIMM memory module up to 2G.

34. MPCIE SCREW HOLES: one screw holes for fixed MPCIE assemble.

Chapter 3 BIOS Setup

3.1 Operations after POST Screen

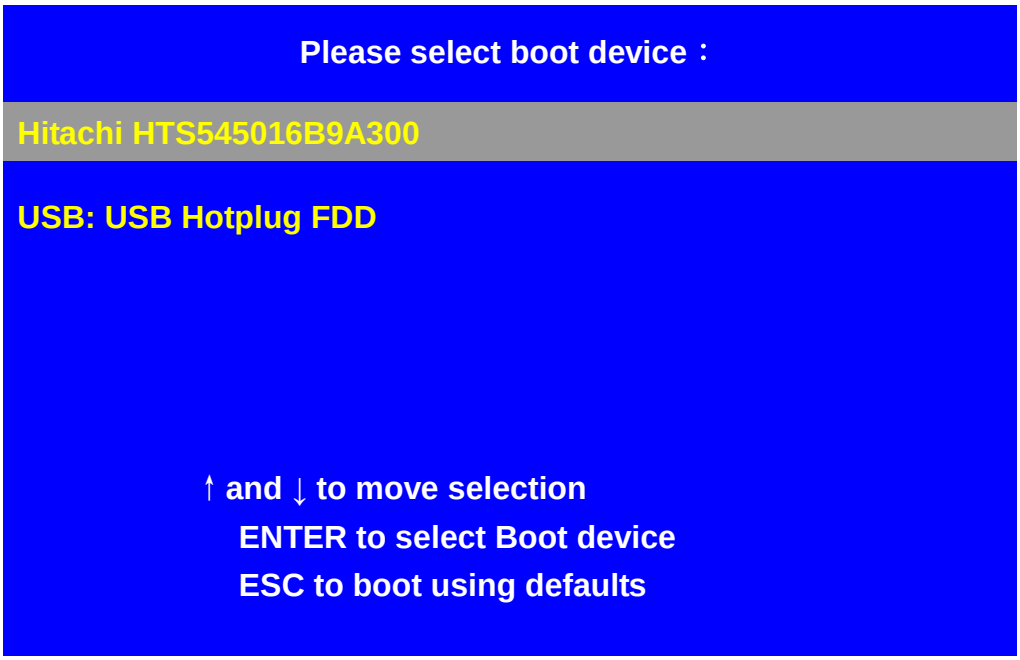
After CMOS discharge or BIOS flashing operation, the system will display the following screen for your further operation. Press F2 key to continue or F1 key to enter CMOS Setup.

American Megatrends
www.ami.com
AMIBIOS© 2009 American Mega trends , Inc.
BIOS Date: 03/22/12 15:57:19 Ver: 08.00.16
CPU : Intel® Atom™ CPU D525 @ 1.80GHz
Speed : 1.80 GHz
Press F11 for BBS POPUP
Initializing USB Controllers. . Done.
2038MB OK
Auto-Detecting Pri Master.. IDE Hard Disk
Pri Master : Hitachi HTS545016B9A300 PB0C64G
Ultra DMA – 5, S.M.A.R.T. Capable and Status OK
Auto – detecting USB Mass Storage Devices ..
00 USB Mass storage devices found and configured
CMOS Settings Wrong
CMOS Data / Time Not Set
Press F1 to Run SETUP
Press F2 to load default values and continue
0085

After optimizing and exiting CMOS Setup, the POST screen displayed for the first time is as follows and includes basic information on BIOS, CPU, memory, and storage devices.

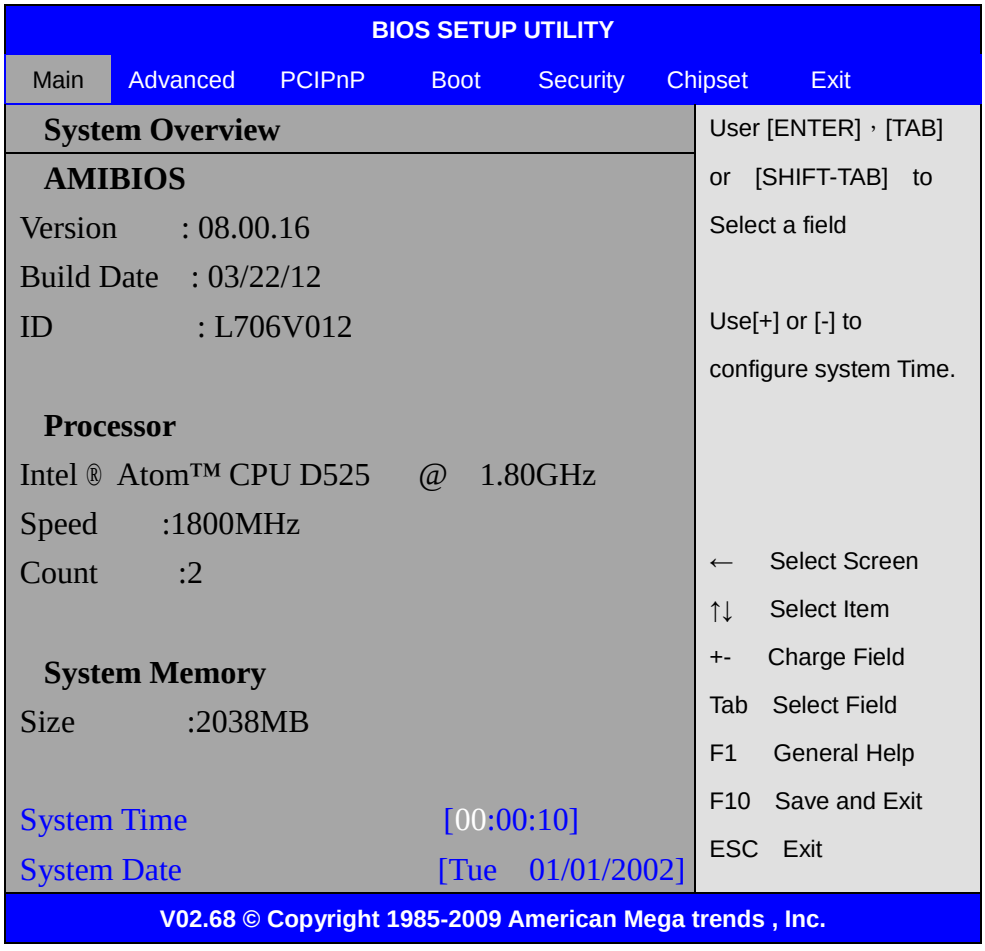
American Megatrends
www.ami.com
AMIBIOS© 2009 American Mega trends , Inc.
BIOS Date: 03/22/12 15:57:19 Ver: 08.00.16
CPU : Intel® Atom™ CPU D525 @ 1.80GHz
Speed : 1.80 GHz
Press DEL to Run Setup
Press F11 for BBS POPUP
Initializing USB Controllers. . Done.
2038MB OK
Auto-Detecting Pri Master.. IDE Hard Disk
Pri Master : Hitachi HTS545016B9A300 PB0C64G
Ultra DMA – 5, S.M.A.R.T. Capable and Status OK
Auto – detecting USB Mass Storage Devices ..
00 USB Mass storage devices found and configured.
Checking NVRAM..
0085

Press **F11** key to enter Boot Menu during POST, as shown by the following figure.

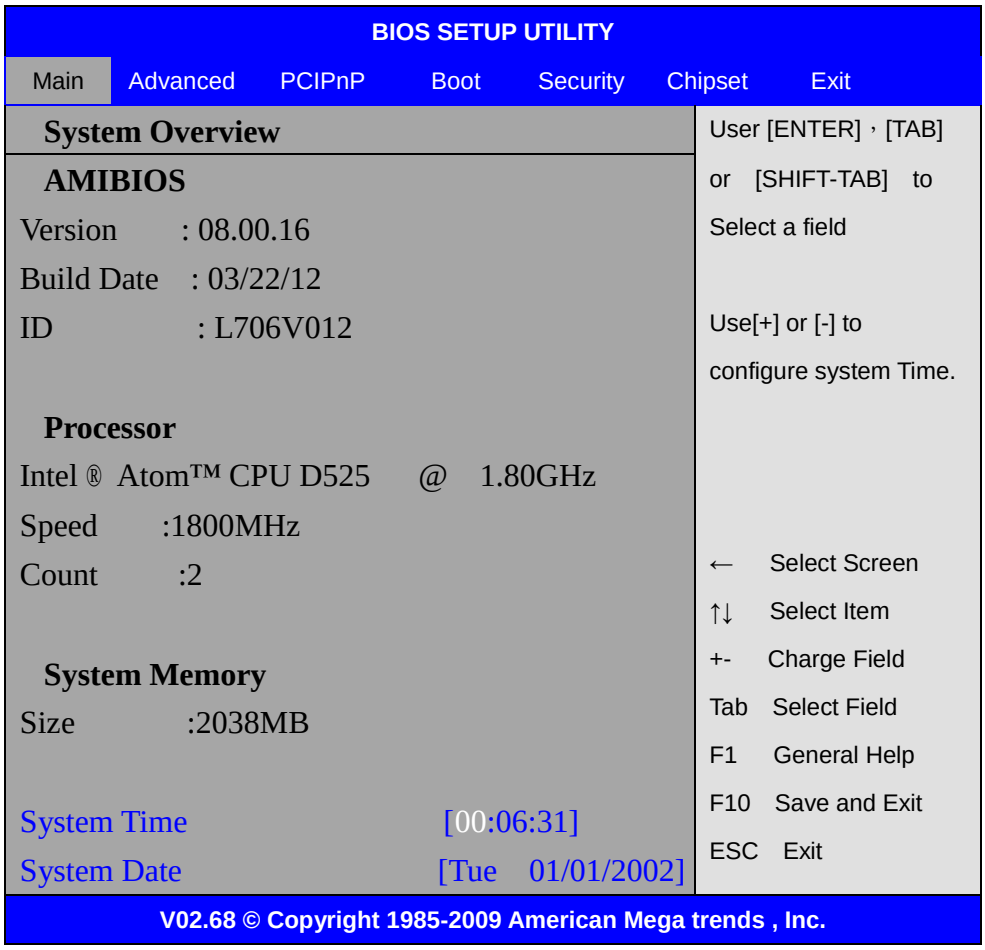

Please select boot device：
Hitachi HTS545016B9A300
USB: USB Hotplug FDD
↑ and ↓ to move selection
ENTER to select Boot device
ESC to boot using defaults

3.2 BIOS SETUP UTILITY

Press [Del] key to enter BIOS Setup utility during POST, and then a main menu containing system summary information will appear.



3.3 System Overview



System Time:

Set the system time, the time format is:

Hour : 0 to 23

Minute : 0 to 59

Second : 0 to 59

System Date:

Set the system date, the date format is:

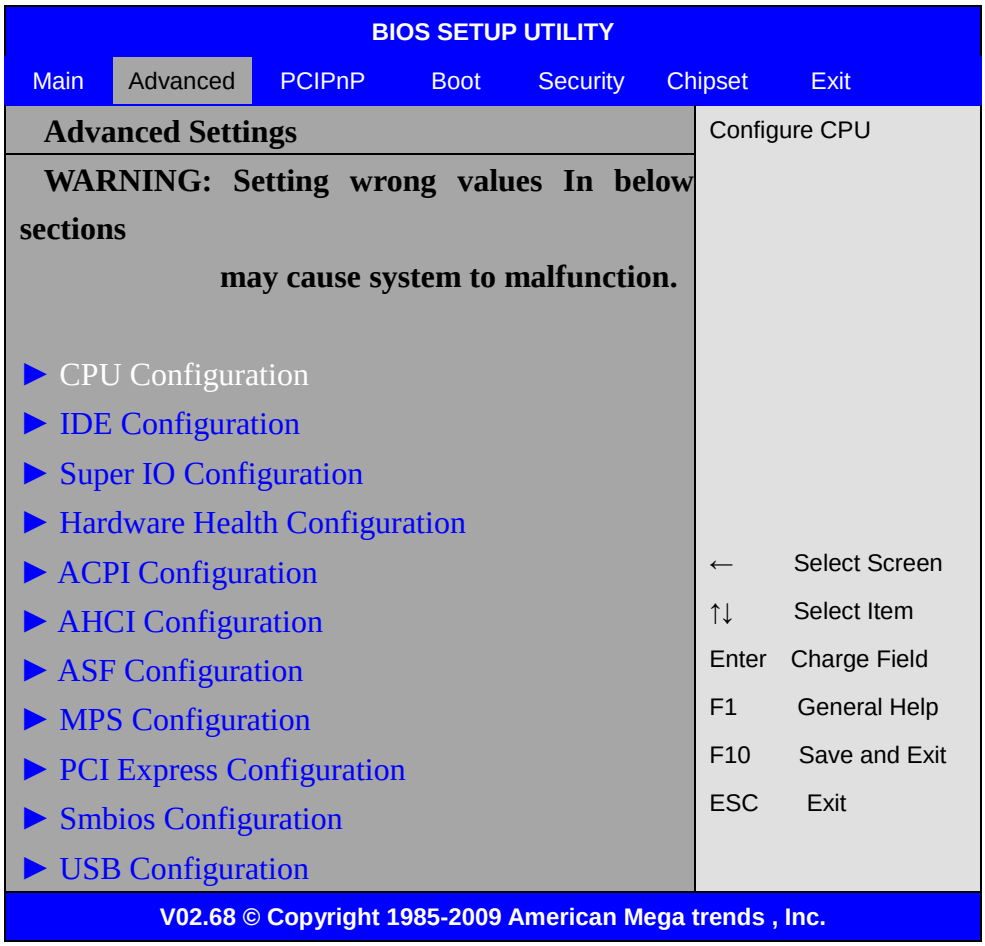
Day: Note that the 'Day' automatically changes when you set the date.

Month: 01 to 12

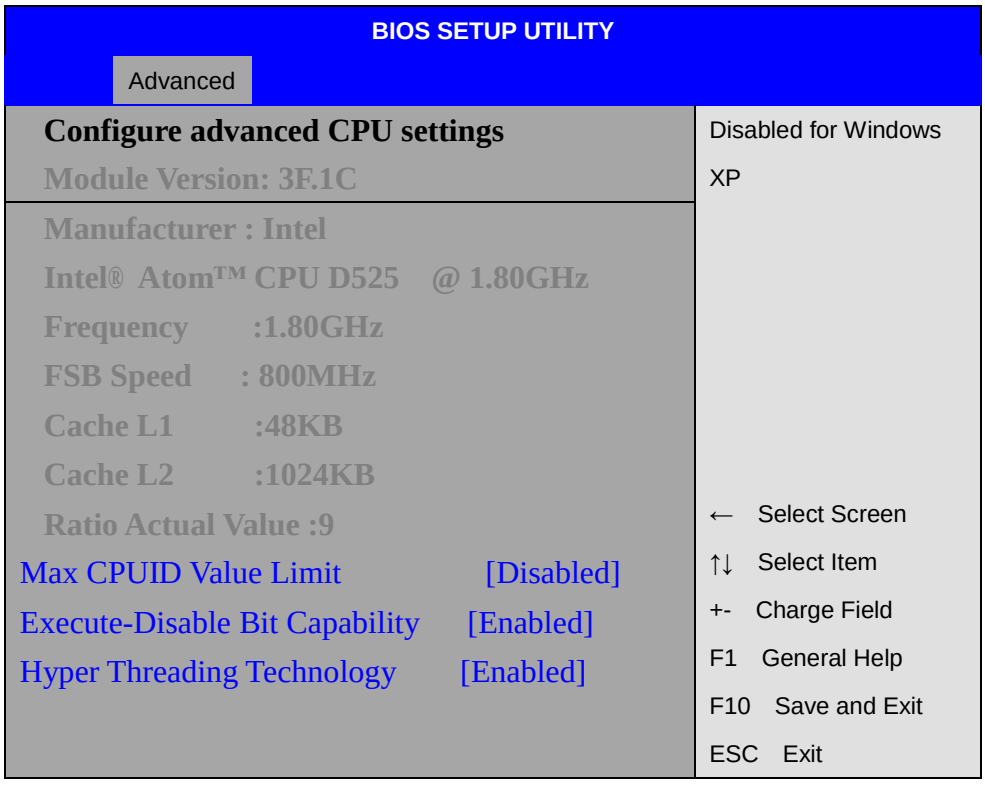
Date: 01 to 31

Year: 2010 to 2099

3.4 Advanced Settings



3.4.1 CPU Configuration



Max CPUID Value Limit:

[Disabled]

[Enabled]

Execute Disable Bit Capability:

[Enabled]

[Disabled]

Hyper Threading Technology:

[Enabled]

[Disabled]

3.4.2 IDE Configuration

BIOS SETUP UTILITY
Advanced
IDE Configuration
ATA/IDE Configuration [Enhanced]
Configure SATA as [IDE]
► Primary IDE Master : [Not Detected]
► Primary IDE Slaver : [Not Detected]
► Secondary IDE Master : [Not Detected]
► Secondary IDE Slaver : [Not Detected]
► Third IDE Master : [Not Detected]
► Third IDE Slaver : [Not Detected]
► Fourth IDE Master : [Not Detected]
► Fourth IDE Slaver : [Not Detected]
Hard Disk Write Protect [Disabled]
IDE Detect Time Out (Sec) [35]
ATA(PI) 80Pin Cable Detection [Host & Device]
Options
Disabled
Enhanced
← Select Screen
↑↓ Select Item
+- Charge Field
F1 General Help
F10 Save and Exit
ESC Exit
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ATA/IDE Configuration:

[Enhanced]

[Disabled]

Configure SATA as:

[IDE]

[RAID]

[AHCI]

Hard Disk Write Protect:

[Disabled]

[Enabled]

IDE Detect Time Out :

[35]

Options: [0,5,10,15,20,25,30,35]

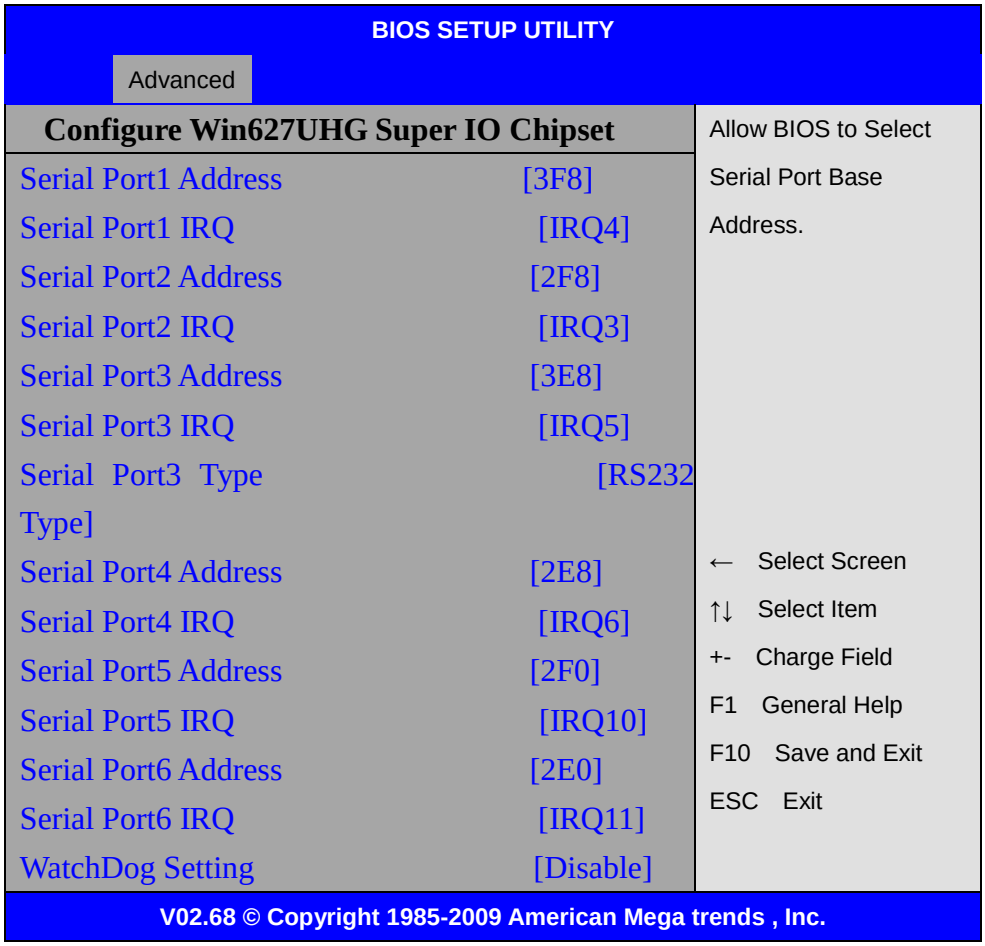
ATA(PI) 80Pin Cable Detection:

[Host & Device]

[Host]

[Device]

3.4.3 Super IO Configuration


BIOS SETUP UTILITY
Advanced
Configure Win627UHG Super IO Chipset
Serial Port1 Address [3F8]
Serial Port1 IRQ [IRQ4]
Serial Port2 Address [2F8]
Serial Port2 IRQ [IRQ3]
Serial Port3 Address [3E8]
Serial Port3 IRQ [IRQ5]
Serial Port3 Type [RS232 Type]
Serial Port4 Address [2E8]
Serial Port4 IRQ [IRQ6]
Serial Port5 Address [2F0]
Serial Port5 IRQ [IRQ10]
Serial Port6 Address [2E0]
Serial Port6 IRQ [IRQ11]
WatchDog Setting [Disable]
Allow BIOS to Select Serial Port Base Address.
← Select Screen
↑↓ Select Item
+- Charge Field
F1 General Help
F10 Save and Exit
ESC Exit
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Serial Port3 Type:

COM3 Options:

[RS232 Type]

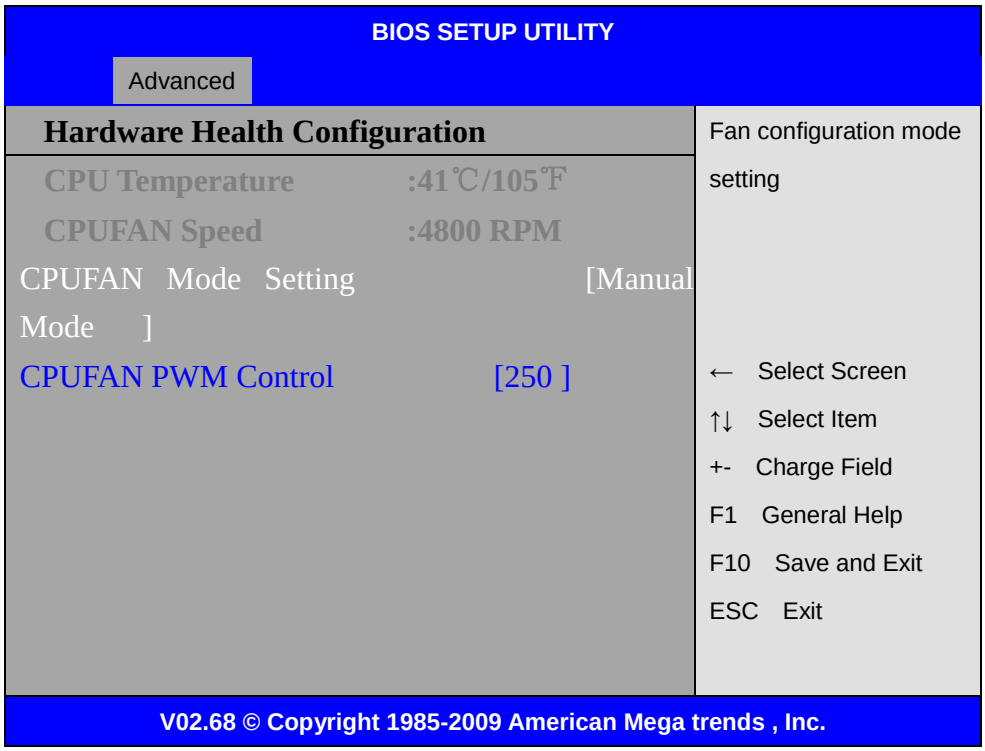
[RS485 Type]

WatchDog Setting:

[Disable]

Options: [10sec,20sec,30sec,40sec,1min,2min,4min]

3.4.4 Hardware Health Configuration



CPU Temperature:

Show you the current CPU temperature.

CPUFAN Speed:

Show you the current CPU Fan operating speed.

CPUFAN Mode Setting:

[Manual Mode]

[Thermal Cruise Mode]

[Speed Cruise Mode]

[Smart Fan3 Mode]

3.4.5 ACPI Configuration

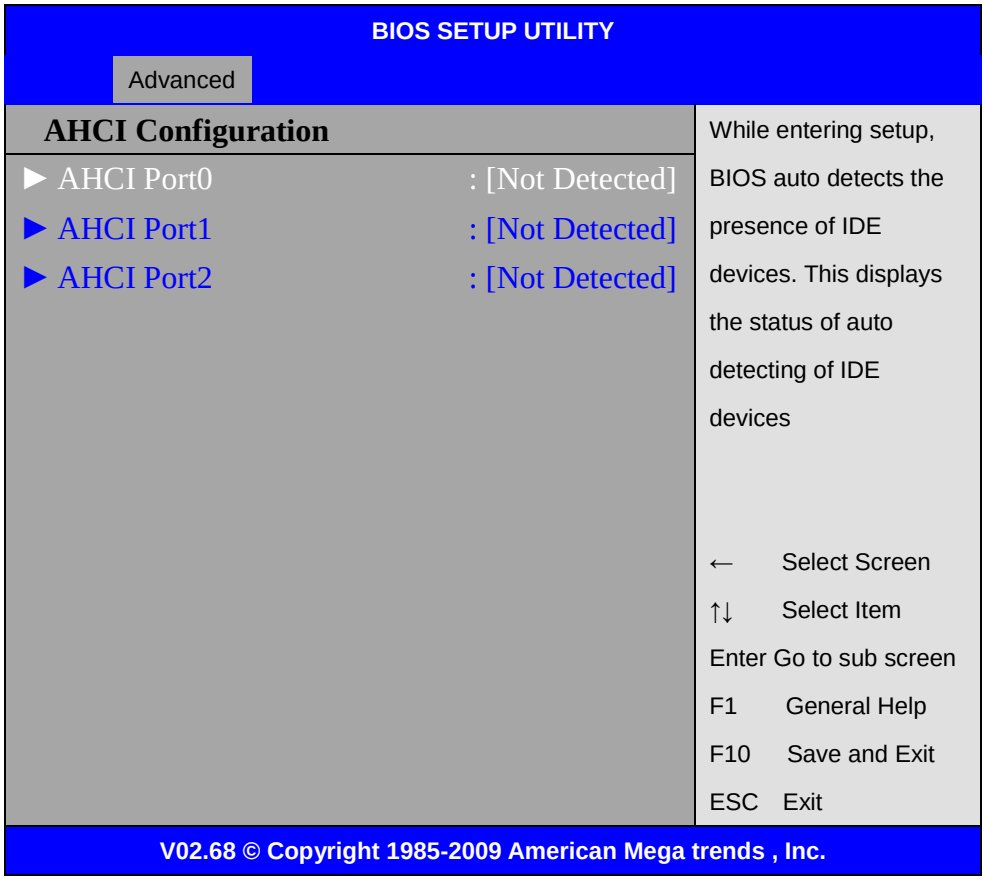
Section for Advanced ACPI Configuration

Options:

[Advanced ACPI Configuration]

[Chipset ACPI Configuration]

3.4.6 AHCI Configuration


BIOS SETUP UTILITY
Advanced
AHCI Configuration
► AHCI Port0 : [Not Detected]
► AHCI Port1 : [Not Detected]
► AHCI Port2 : [Not Detected]
While entering setup, BIOS auto detects the presence of IDE devices. This displays the status of auto detecting of IDE devices
← Select Screen
↑↓ Select Item
Enter Go to sub screen
F1 General Help
F10 Save and Exit
ESC Exit
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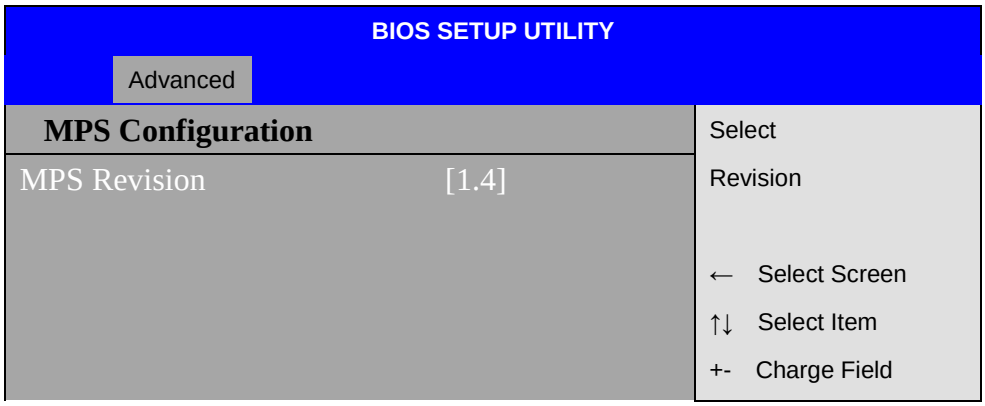
While entering setup, BIOS auto detects the presence of IDE devices. This displays the status of auto detecting of IDE devices

3.4.7 MPS Configuration



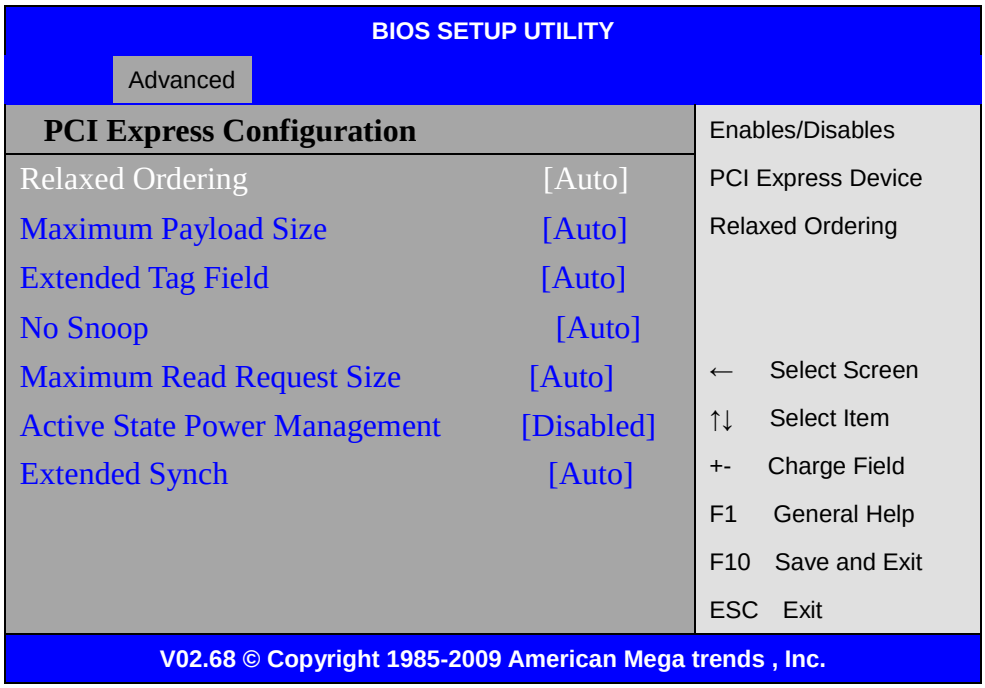
Configure the Multi-Processor Table.

MPS Revision:

[1.4]

[1.1]

3.4.8 PCI Express Configuration



Relaxed Ordering:

[Auto]

[Disabled]

[Enable]

Maximum Payload Size:

[Auto]

[128/256/512/1024/2048/4096 Bytes]

Set Maximum Payload of allow System BIOS select the value.

Extended Tag Field:

[Auto]

[Disabled]

[Enable]

No Snoop:

[Auto]

[Disabled]

[Enable]

Maximum Read Request Size:

[Auto]

[128/256/512/1024/2048/4096 Bytes]

Set Maximum Read Request Size of PCI Express Device or allow System BIOS select the value.

Active State Power Management:

[Disabled]

[Enable]

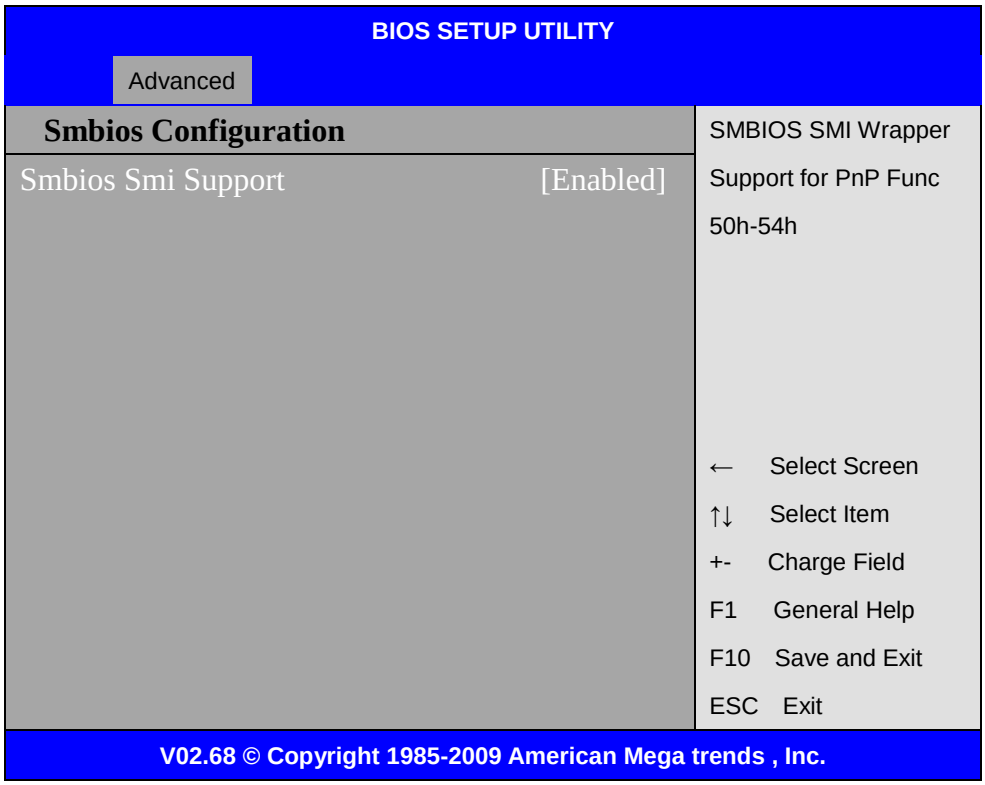
Extended Synch:

[Auto]

[Disabled]

[Enable]

3.4.9 Smbios Configuration

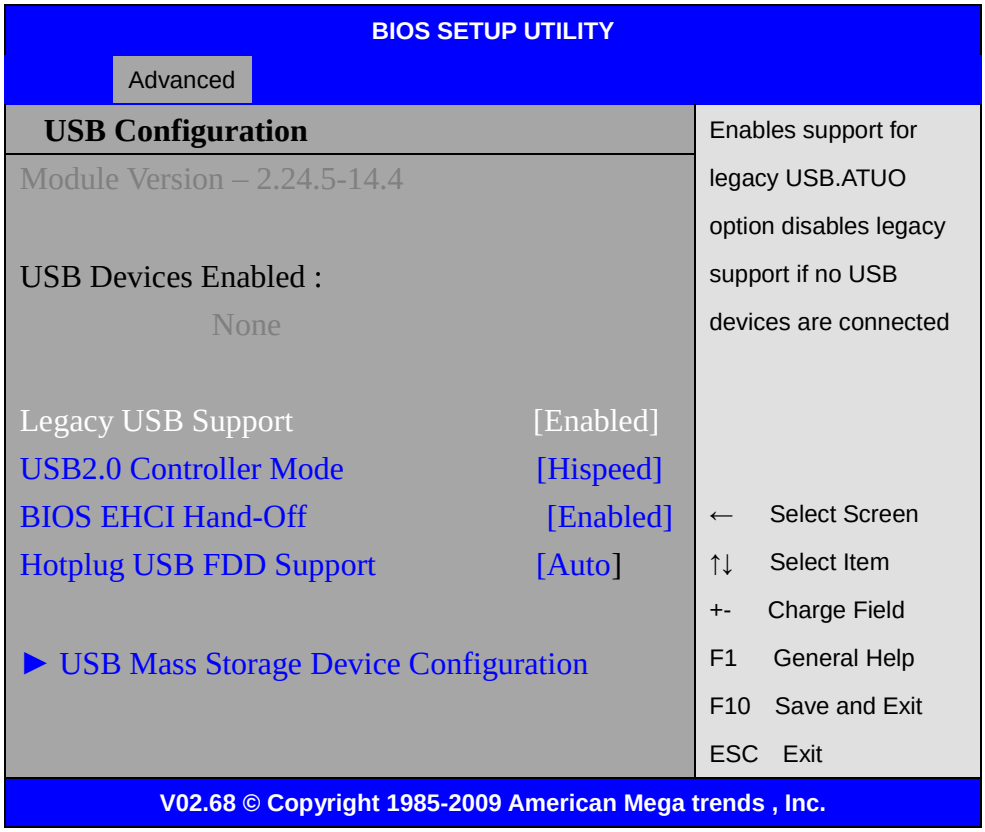


Smbios Smi Support:

[Enable]

[Disabled]

3.4.10 USB Configuration


BIOS SETUP UTILITY
Advanced
USB Configuration
Module Version – 2.24.5-14.4
USB Devices Enabled :
None
Legacy USB Support [Enabled]
USB2.0 Controller Mode [Hispeed]
BIOS EHCI Hand-Off [Enabled]
Hotplug USB FDD Support [Auto]
► USB Mass Storage Device Configuration
Enables support for legacy USB.ATUO option disables legacy support if no USB devices are connected
← Select Screen
↑↓ Select Item
+- Charge Field
F1 General Help
F10 Save and Exit
ESC Exit
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Legacy USB Support:

[Enable]
[Disabled]

USB2.0 Controller Mode:

[HiSpeed]
[FullSpeed]

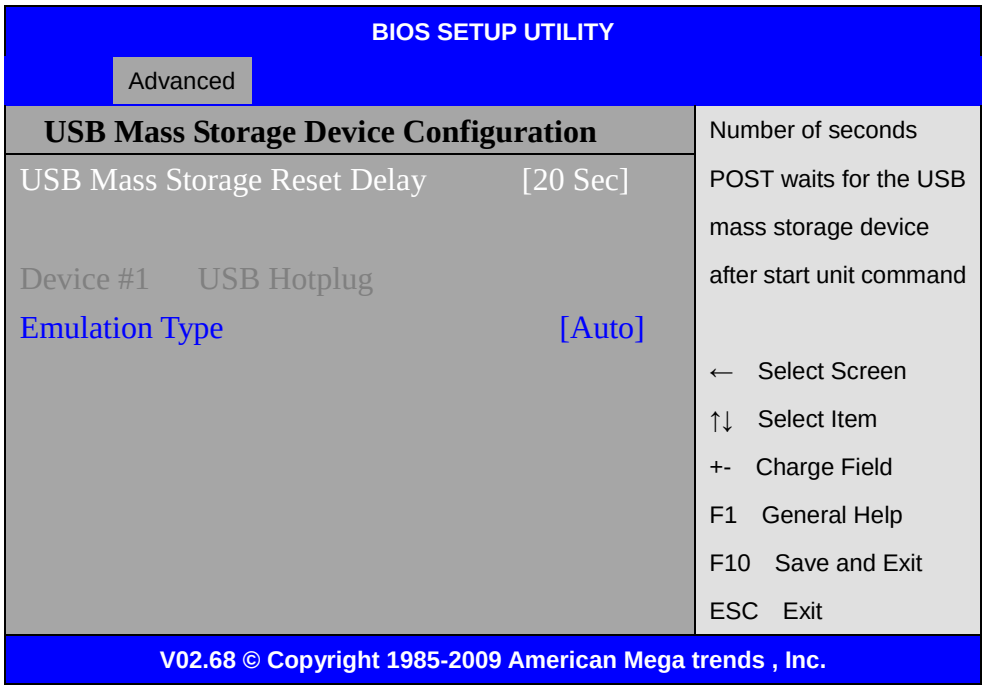
BIOS EHCI Hand-Off:

[Enable]
[Disabled]

Hotplug USB FDD Support:

[Auto]
[Disabled]
[Enable]

USB Mass Storage Device Configuration:


BIOS SETUP UTILITY
Advanced
USB Mass Storage Device Configuration
USB Mass Storage Reset Delay [20 Sec]
Device #1 USB Hotplug
Emulation Type [Auto]
Number of seconds POST waits for the USB mass storage device after start unit command
← Select Screen
↑↓ Select Item
+- Charge Field
F1 General Help
F10 Save and Exit
ESC Exit
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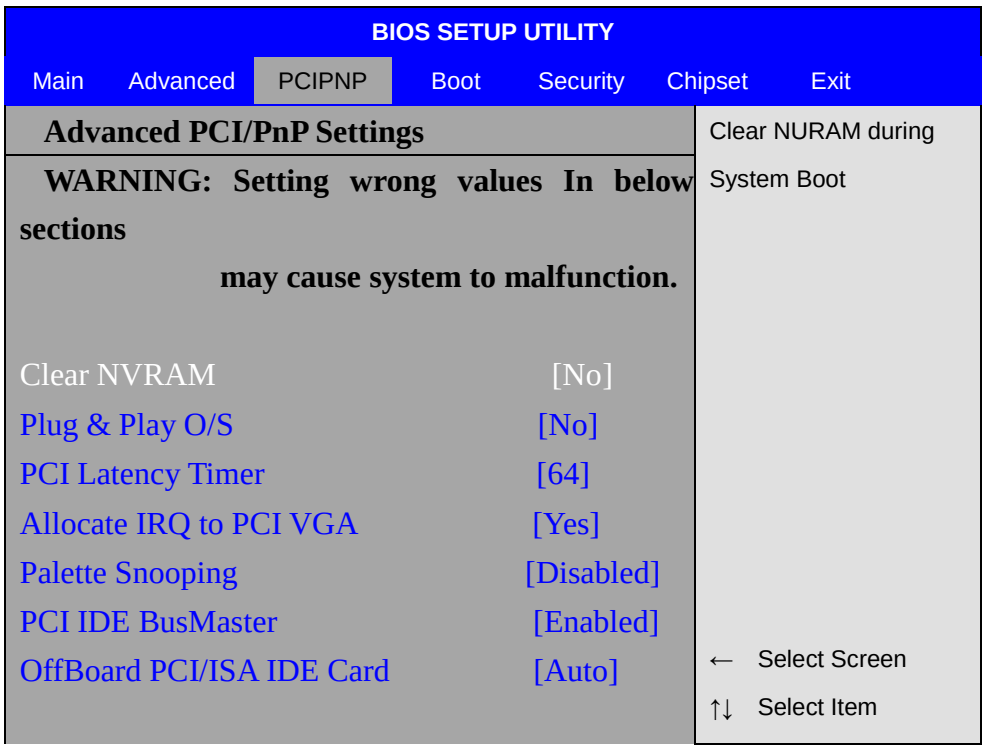
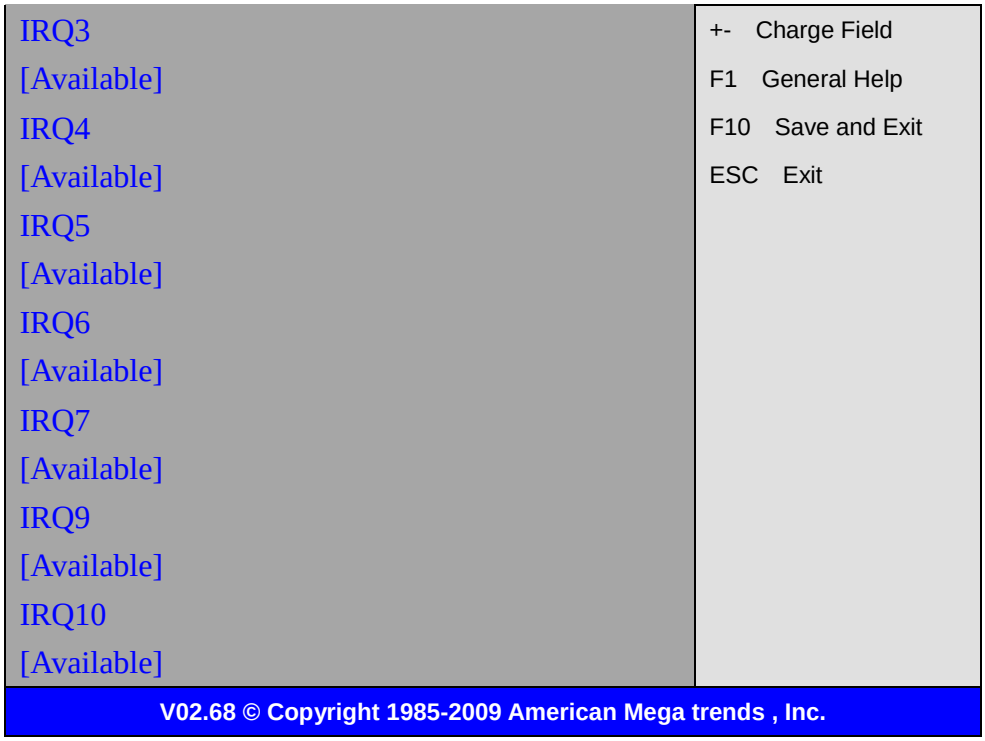
3.5 Advanced PCI/PnP Settings

This part describes configurations to be made on PCI bus system. PCI, namely Personal Computer Interconnect, is a computer bus that allows I/O device to operate nearly as fast as CPU in its own way. Some technical terms will be mentioned here. **We recommend that non-professional users not make changes from factory default settings.**


BIOS SETUP UTILITY
Main Advanced PCIPNP Boot Security Chipset Exit
Advanced PCI/PnP Settings
WARNING: Setting wrong values In below sections
may cause system to malfunction.
Clear NVRAM [No]
Plug & Play O/S [No]
PCI Latency Timer [64]
Allocate IRQ to PCI VGA [Yes]
Palette Snooping [Disabled]
PCI IDE BusMaster [Enabled]
OffBoard PCI/ISA IDE Card [Auto]
Clear NURAM during System Boot
← Select Screen
↑↓ Select Item



Clear NVRAM:

[**No**]

[Yes]

Plug & Play OS:

[**No**]

[Yes]

PCI Latency Timer:

[**64**]

[32]

[96]

[128]

[160]

[192]

[224]

[248]

Allocate IRQ to PCI/VGA:

[Yes]

[No]

Palette Snooping:

[Disabled]

[Enable]

PCI IDE BusMaster:

[Disabled]

[Enable]

OffBoard PCI/ISA IDE Card:

Some PCI IDE cards may require this to be set to the PCI slot number that is holding the card. Auto:Works for most PCI IDE Cards.

[Auto]

[PCI Slot1]

[PCI Slot2]

[PCI Slot3]

[PCI Slot4]

[PCI Slot5]

[PCI Slot6]

IRQ3/4/5/7/9/10/11/14/15:

[Available]

[Reserved]

Available: Specified IRQ is available to be used by PCI/PnP devices.

Reserved: Specified IRQ is reserved for use by legacy ISA devices.

DMA Channel 0/1/3/5/6/7:

[Available]

[Reserved]

Available: Specified DMA is available to be used by PCI/PnP devices.

Reserved: Specified DMA is reserved for use by legacy ISA devices.

Reserved Memory Size:

Size of memory block to reserve for legacy ISA devices.

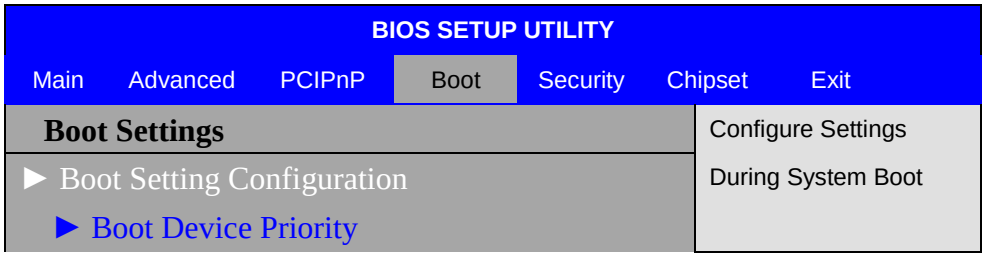
[Disabled]

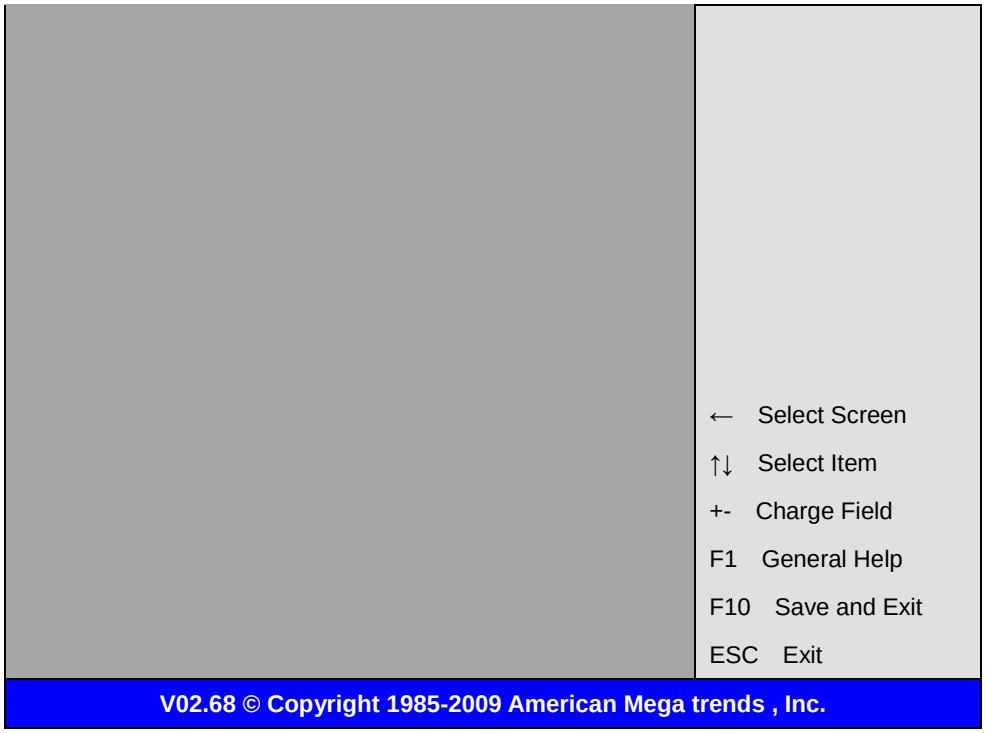
[16k]

[32k]

[64k]

3.6 Boot Settings





Boot Setting Configuration：

Quick Boot:

[**Enabled**]

[Disabled]

Allows BIOS to skip certain tests while booting .This will decrease the time needed to boot the system.

Quiet Boot:

[**Disabled]**

[Enabled]

Disabled: Displays normal POST messages.

Enabled: Displays OEM logo instead of POST messages.

AddOn ROM Display Mode:

Set display mode for Option ROM.

[**Force BIOS**]

[Keep Current]

Bootup Num－Lock:

Select Power-on state for Numlock.

[**On]**

[Off]

PS/2 Mouse Support,:

Select support for PS/2 Mouse.

[**Auto**]
[Enabled]
[Disabled]

Wait For ‘F1’ If Error:

Wait for F1 key to be pressed if error occurs.

[**Enabled**]
[Disabled]

Hit ‘DEL’Messgae Display :

Displays “press” DEL to run Setup in POST.

[**Enabled**]
[Disabled]

Interrupt 19 Capture:

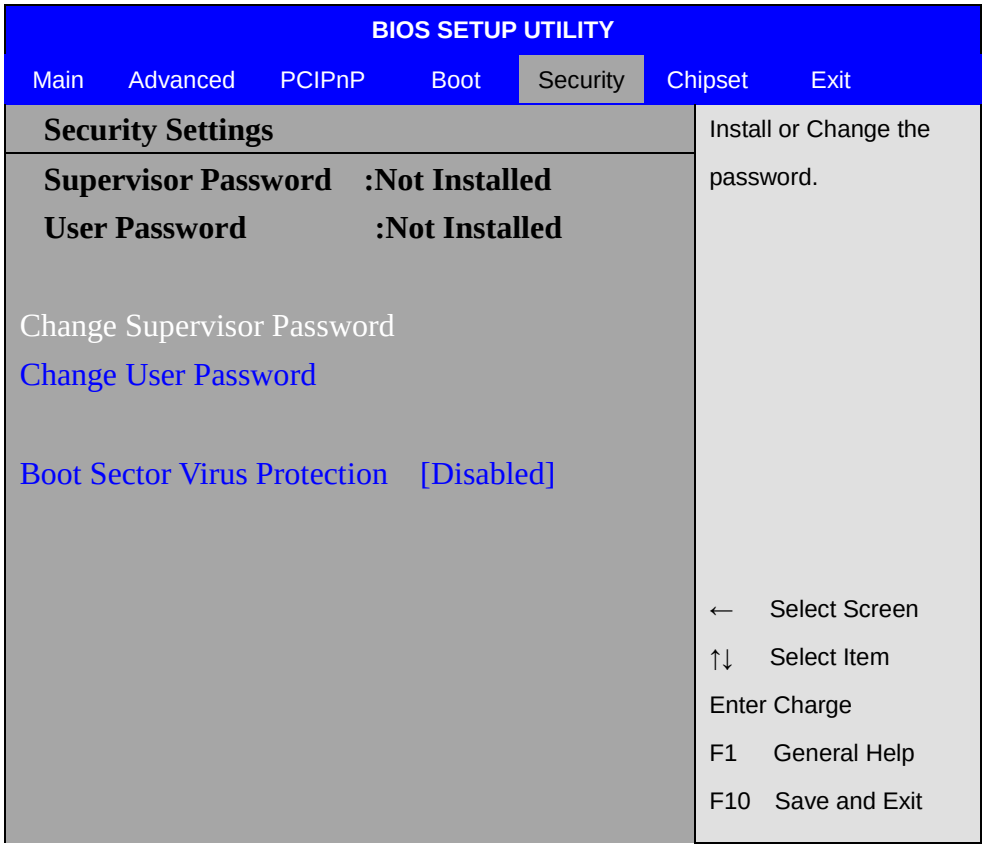
[Disabled]
[Enabled]

Enabled: Allows option ROMs to trap interrupt 19.

Boot Device Priority:

Specifies the Boot Device Priority sequence.

3.7 Security Settings



Change Supervisor Password:

Install or Change the password.

Change User Password:

Install or Change the password.

Password Check:

[Setup]

[Always]

Setup: Check password while invoking setup.

Always: Check password while invoking setup a well as on each boot.

Boot Sector Virus Protection:

[Disabled]

[Enabled]

Enabled / Disabled Boot Sector Virus Protection.

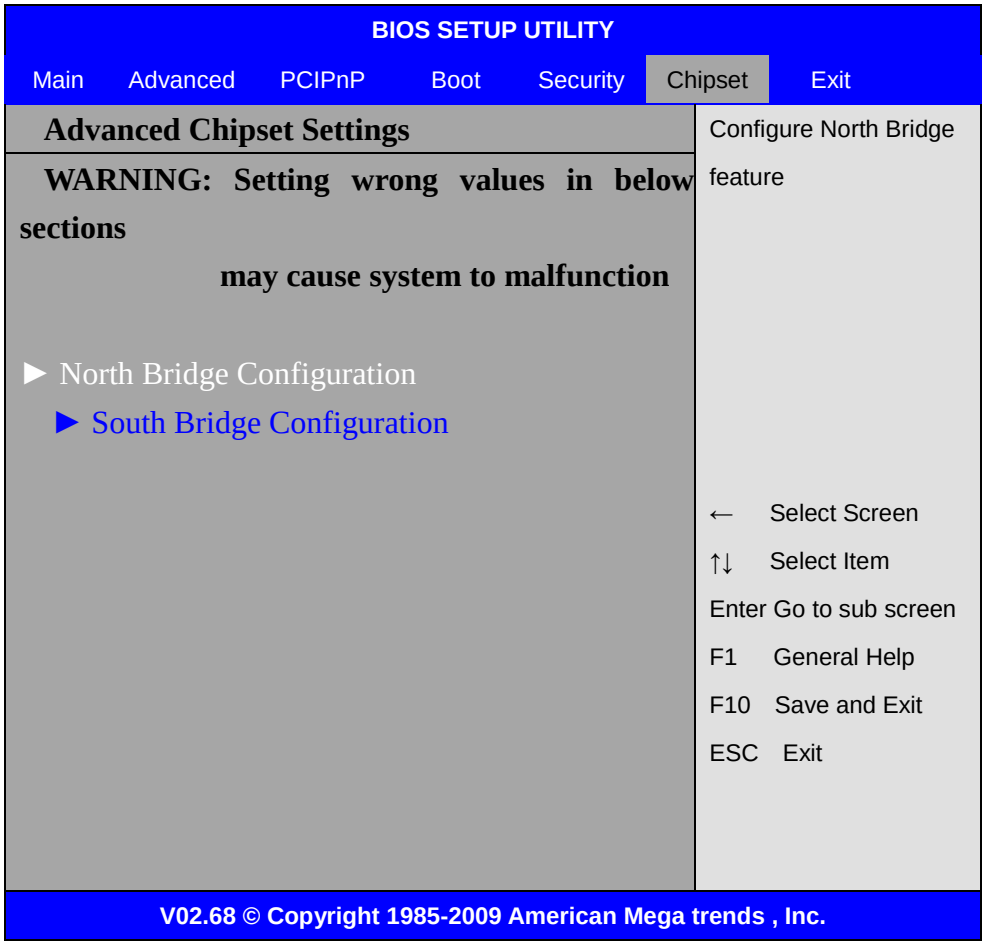
Type the password with up to 6 characters and then press ≺Enter≻ key. This will clear all previously typed CMOS passwords. You will be requested to confirm the password. Type the password again and press ≺Enter≻ key. You may press ≺Esc≻ key to abandon password entry operation.

To clear the password, just press ≺Enter≻ key when password input window pops up. A confirmation message will be shown on the screen as to whether the password will be disabled. You will have direct access to BIOS setup without typing any password after system reboot once the password is disabled.

Once the password feature is used, you will be requested to type the password each time you enter BIOS setup. This will prevent unauthorized persons from changing your system configurations.

Also, the feature is capable of requesting users to enter the password prior to system boot to control unauthorized access to your computer. Users may enable the feature in Security Option of Advanced BIOS Features. If Security Option is set to System, you will be requested to enter the password before system boot and when entering BIOS setup; if Security Option is set to Setup, you will be requested for password for entering BIOS setup.

3.8 Advanced Chipset Settings


BIOS SETUP UTILITY
Main Advanced PCIPnP Boot Security Chipset Exit
Advanced Chipset Settings
WARNING: Setting wrong values in below sections
may cause system to malfunction
► North Bridge Configuration
► South Bridge Configuration
Configure North Bridge feature
← Select Screen
↑↓ Select Item
Enter Go to sub screen
F1 General Help
F10 Save and Exit
ESC Exit
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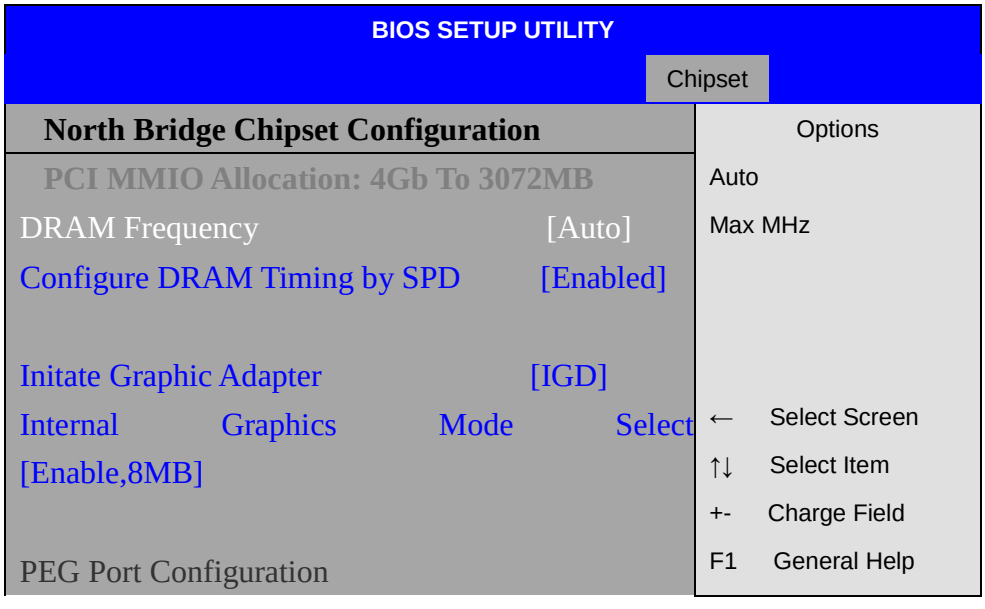
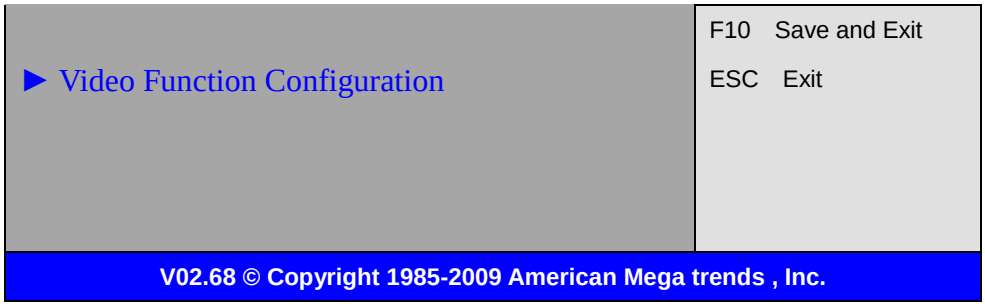
Note: Due to limited address length of BIOS, only a portion of panel parameters are listed in BIOS Setup. If the connected panel is not included in the parameter list, display problem will occur. In this case, Please do not change BIOS setup.

3.8.1 North Bridge Configuration





DRAM Frequency:

[**Auto]**
[Max MHz]

Configure DRAM Timing By SPD:

[**Enabled**]
[Disabled]

Initate Graphic Adapter:

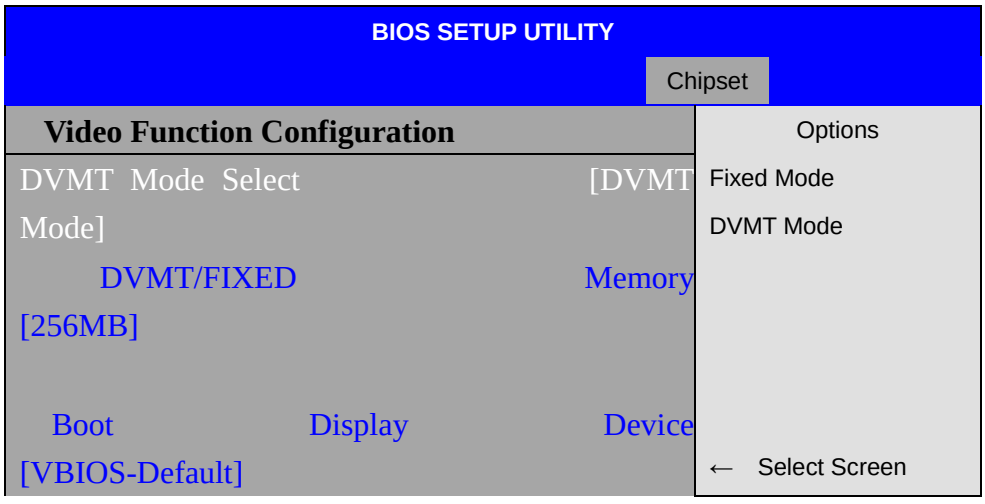
Select which graphics controller to use as the primary boot device.

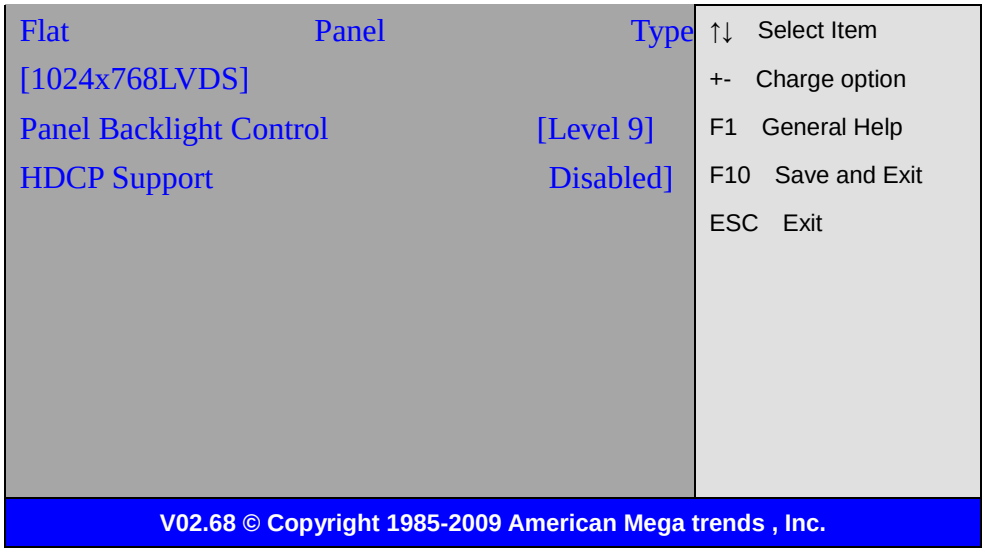
[**IGD**]
[PCI/IGD]
[PCI/PEG]
[PEG/IGD]
[PCIE/PCI]

Internal Graphics Mode Select:

[**Enabled, 8MB**]

Video Function Configuration:





DVMT Mode Select:

[**DVMT Mode**]
[FIXED Mode]

DVMT/FIXED Memory Size:

[**256MB**]
[128MB]
[Maximum DVMT]

Boot Display Device:

[**VBIOS-Default**]
[CRT]
[LVDS]
[CRT + LVDS]

Flat Panel Type:

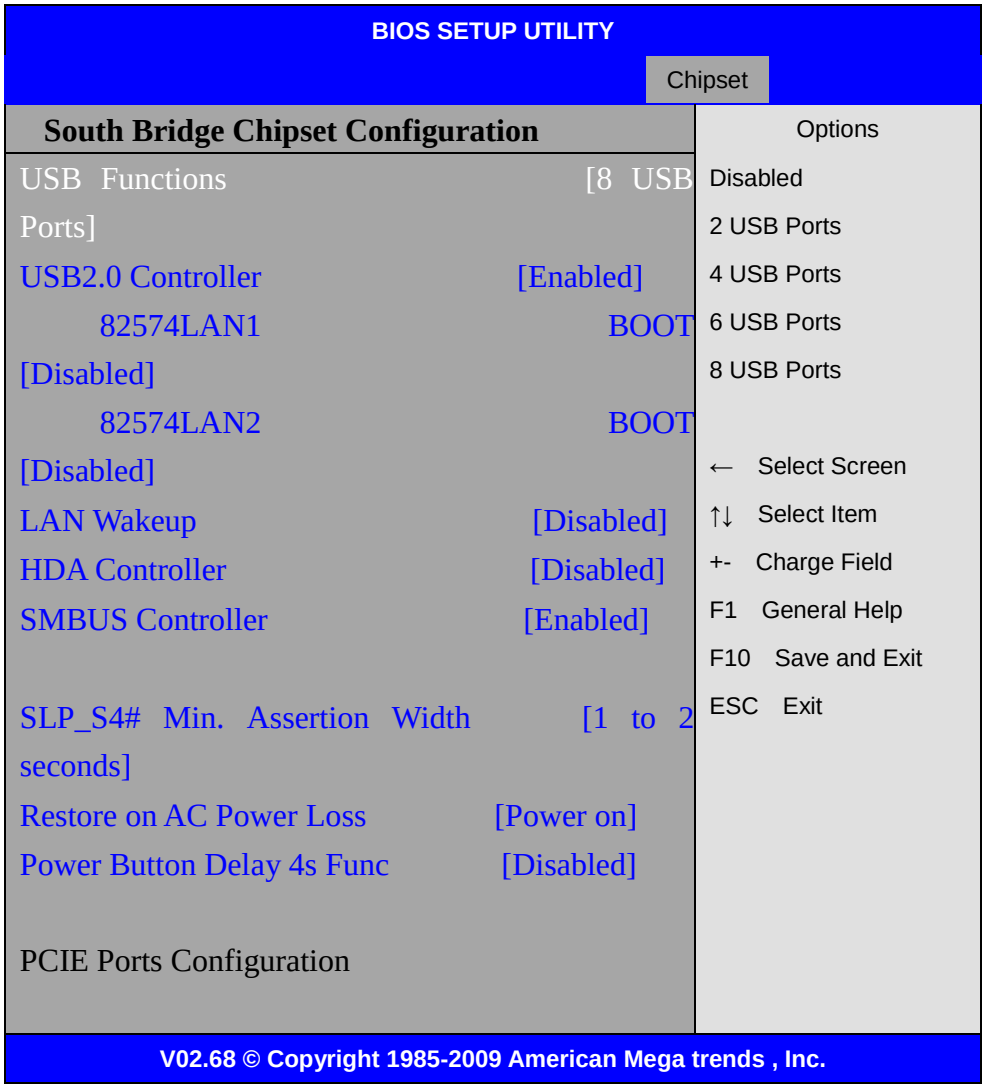
[1024x 768LVDS]
[640x480LVDS]
[800x600LVDS]
[1280x1024LVDS]
[1366x768LVDS]

Panel Backlight Control:

[Level9]
[Level0~15]

Note: Panel support PWM Function.

3.8.2 South Bridge Configuration:



USB Functions:

[6 USB Ports]
[Disabled]，
[2 USB Ports]
[4 USB Ports]
[6 USB Ports]

USB 2.0 Controller:

[**Enabled**]
[Disabled]

82574L LAN1 Boot:

[**Disabled**]
[Enabled]

82574L LAN2 Boot

[**Disabled**]
[Enabled]

LAN WakeUp:

[**Disabled**]
[Enabled]

HDA Controller:

[**Enabled**]
[Disabled]

SMBUS Controller:

[**Enabled**]
[Disabled]

SLP_S4# Min. Assertion Width:

[1 to 2 Seconds]
[4 to 5 Seconds]
[3 to 4 Seconds]
[2 to 3 Seconds]

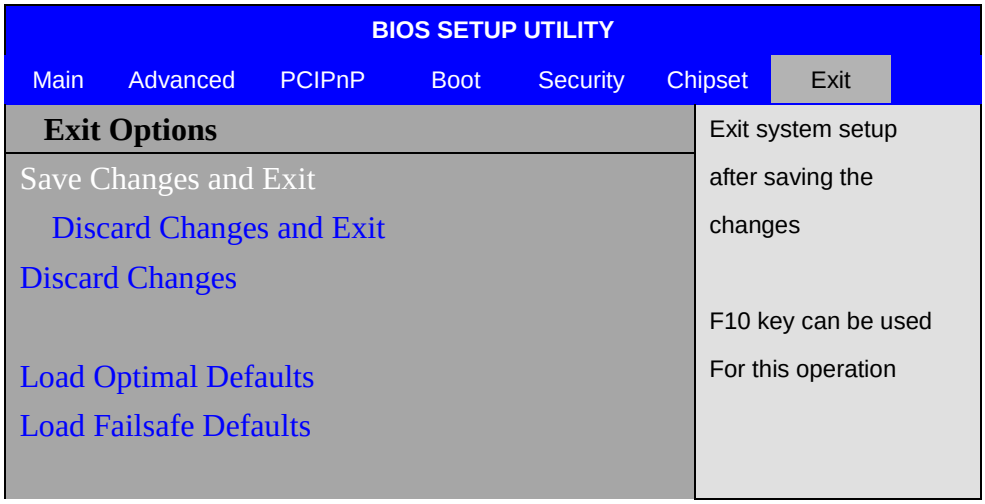
Restore on AC Power Loss:

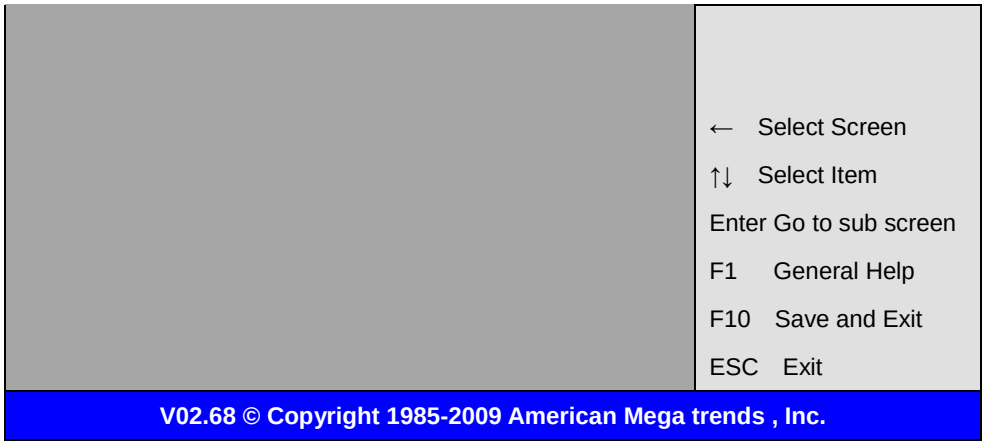
[Turn On]
[Power Off]
[Last Status]

Power Button Delay 4s Func：

[**Disabled**]
[Enabled]

3.9 Exit Options




← Select Screen
↑↓ Select Item
Enter Go to sub screen
F1 General Help
F10 Save and Exit
ESC Exit
V02.68 © Copyright 1985-2009 American Mega trends , Inc.

Save Changes and Exit:

Save configuration changes and exit setup?

(F10 key can be used for this operation)

[OK]

[Cancel]

Discard Changes and Exit:

Discard Changes and Exit setup?

(ESC key can be used for this operation)

[OK]

[Cancel]

Discard Changes:

Diacard changes?

(F7 key can be used for this operation)

[OK]

[Cancel]

Load Optimized Defaults:

Load Optimized Defaults?

(F9 key can be used for this operation)

[OK]

[Cancel]

Load Fail-Safe Defaults:

Load Fail-Safe Defaults?

(F9 key can be used for this operation)

[OK]

[Cancel]

Chapter 4 Installation of Drivers

This chapter describes the installation procedures for software and drivers under the windows XP. The software and drivers are included with the motherboard. The contents include Intel **chipset driver, VGA driver, LAN driver, Audio driver, Touch Panel driver.**
Installation instructions are given below.

Important Note:
After installing your Windows operating system (Windows XP), you must install first the Intel Chipset Software Installation Utility before proceeding with the installation of drivers.

4.1 Intel Chipset Driver

To install the Intel chipset driver, please follow the steps below.

Step 1. Select **Intel (R) Chipset Atom D525/N455 + ICH8M** from the list

Step 2. Click **Next** to setup program.

Intel® Chipset Device Software
Intel® Chipset Device Software
Welcome to the Setup Program
This setup program will install the Intel® Chipset Device Software onto this computer. It is strongly recommended that you exit all programs before continuing.
< Back
Next >
Cancel
Intel® Installation Framework

Step 3. Read the license agreement. Click **Yes** to accept the terms of the license agreement.

Intel® Chipset Device Software
Intel® Chipset Device Software
License Agreement
intel
You must accept all of the terms of the license agreement in order to continue the setup program. Do you accept the terms?
INTEL SOFTWARE LICENSE AGREEMENT (OEM / IHV / ISV Distribution & Single User)
IMPORTANT - READ BEFORE COPYING, INSTALLING OR USING.
Do not use or load this software and any associated materials (collectively, the "Software") until you have carefully read the following terms and conditions. By loading or using the Software, you agree to the terms of this Agreement. If you do not wish to so agree, do not install or use the Software.
Please Also Note:
* If you are an Original Equipment Manufacturer (OEM), Independent Hardware Vendor (IHV), or Independent Software Vendor (ISV), this complete LICENSE AGREEMENT applies;
< Back
Yes
No
Intel® Installation Framework

Step 4. Click **Next** to continue.

Intel® Chipset Device Software
Intel® Chipset Device Software
Readme File Information
intel
Refer to the Readme file below to view the system requirements and installation information.
Press the Page Down key to view the rest of the file.
****
* Product: Intel(R) Chipset Device Software
* Release: Production Version
* Version: 8.8.0.1011
* Target Chipset#: Intel(R) SCH Family
* Date: April 02 2008
****
< Back
Next >
Cancel
Intel® Installation Framework

Step 5. Click **Next**.

Intel® Chipset Device Software
Intel® Chipset Device Software
Setup Progress
Please wait while the following setup operations are performed:
Installing Driver: Intel(R) ICH8 Family USB Universal Host Controller - 2830
Version: 8.0.0.1008
Installing Driver: Intel(R) ICH8 Family USB Universal Host Controller - 2831
Version: 8.0.0.1008
Installing Driver: Intel(R) ICH8 Family USB Universal Host Controller - 2832
Version: 8.0.0.1008
Installing Driver: Intel(R) ICH8 Family USB2 Enhanced Host Controller - 2836
Version: 8.0.0.1008
Click Next to continue.
Next
Intel® Installation Framework

Step 6. Select **Yes, I want to restart this computer now.** Click **Finish** then remove any installation media from the drives.

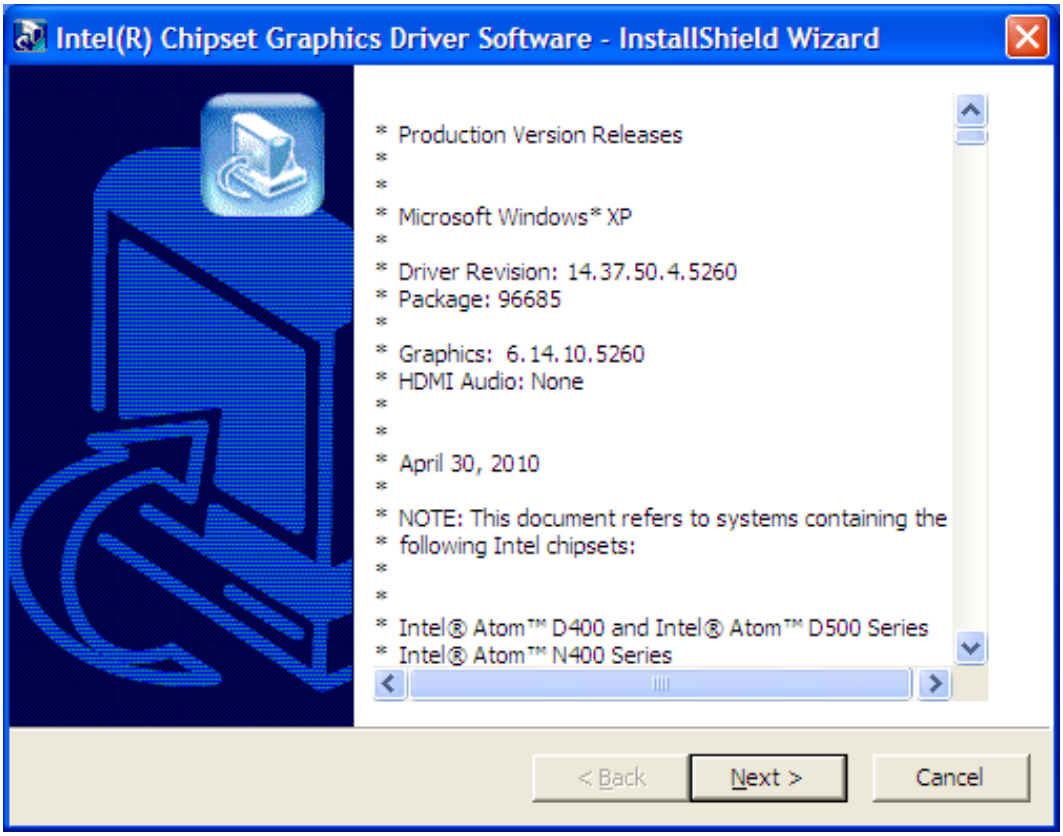
Intel® Chipset Device Software
Intel® Chipset Device Software
Setup Is Complete
You must restart this computer for the changes to take effect. Would you like to restart the computer now?
Yes, I want to restart this computer now.
No, I will restart this computer later.
Click Finish, then remove any installation media from the drives.
Finish
Intel® Installation Framework

4.2 Intel GMA 3150 VGA Chipset Driver

To install the VGA drivers, follow the steps below to proceed with the installation.

Step 1. Select **Intel GMA 3150 VGA Chipset.**

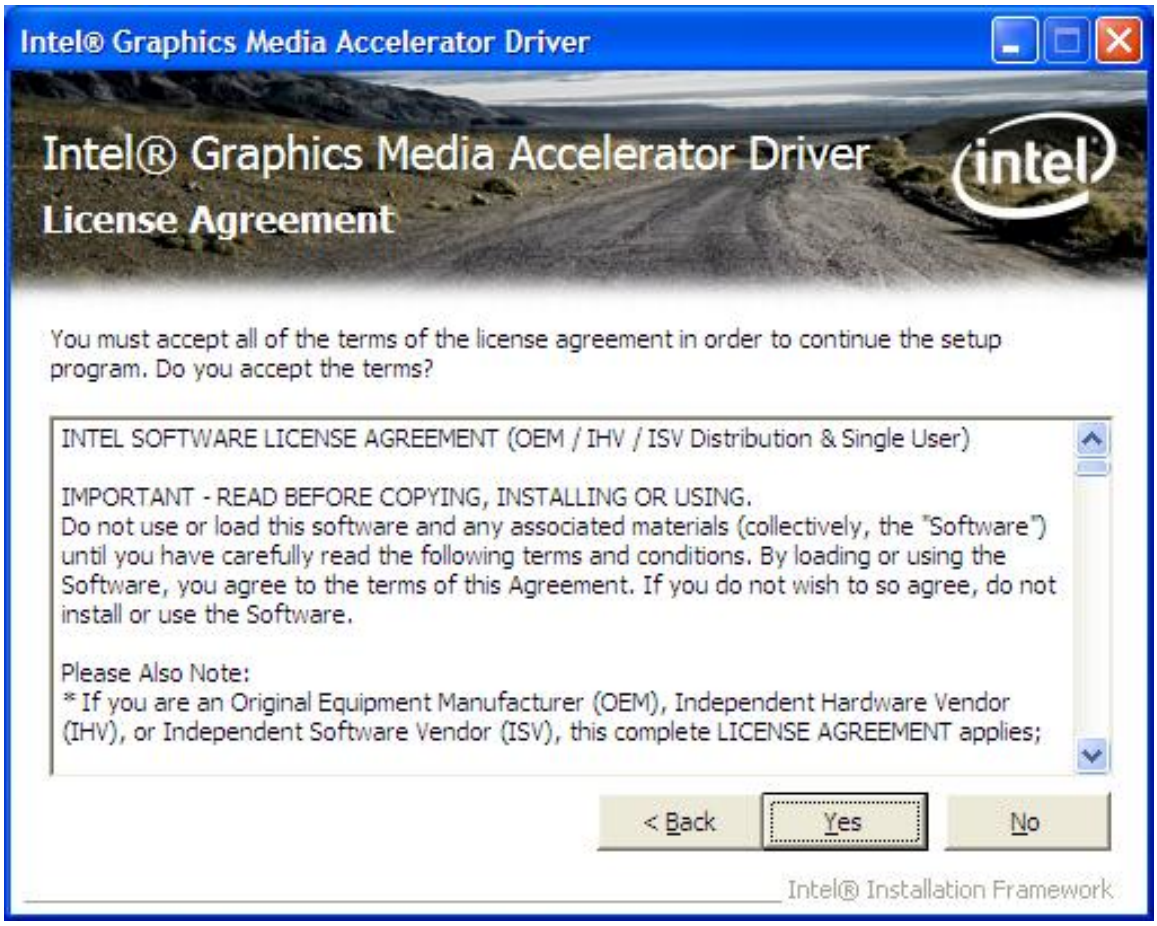
Step 2. Click **Next** to continue.



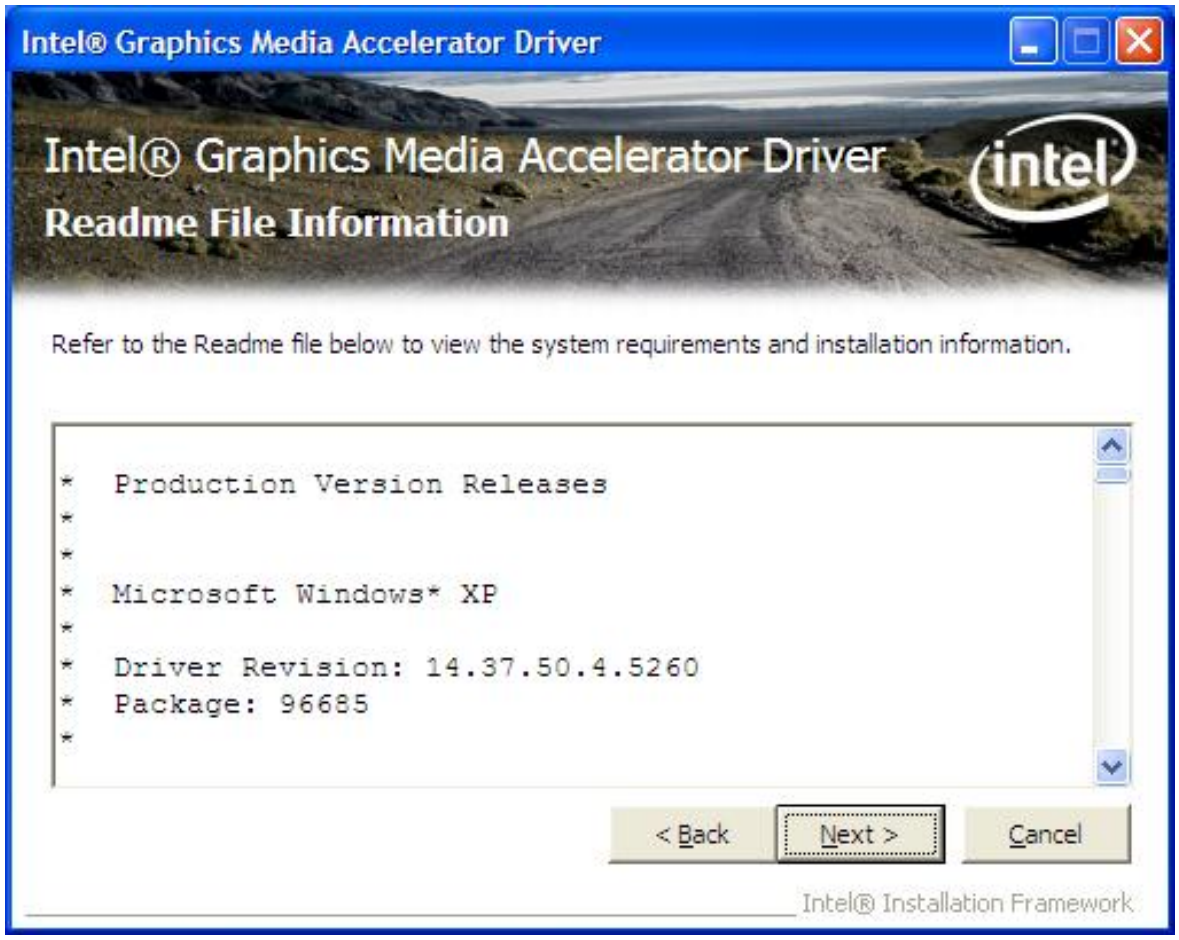
Step 3. Click **Next** to continue setup program.

Intel® Graphics Media Accelerator Driver
Intel® Graphics Media Accelerator Driver
Welcome to the Setup Program
This setup program will install the Intel® Graphics Media Accelerator Driver onto this computer. It is strongly recommended that you exit all programs before continuing. Click Next to continue.
< Back
Next >
Cancel
Intel® Installation Framework

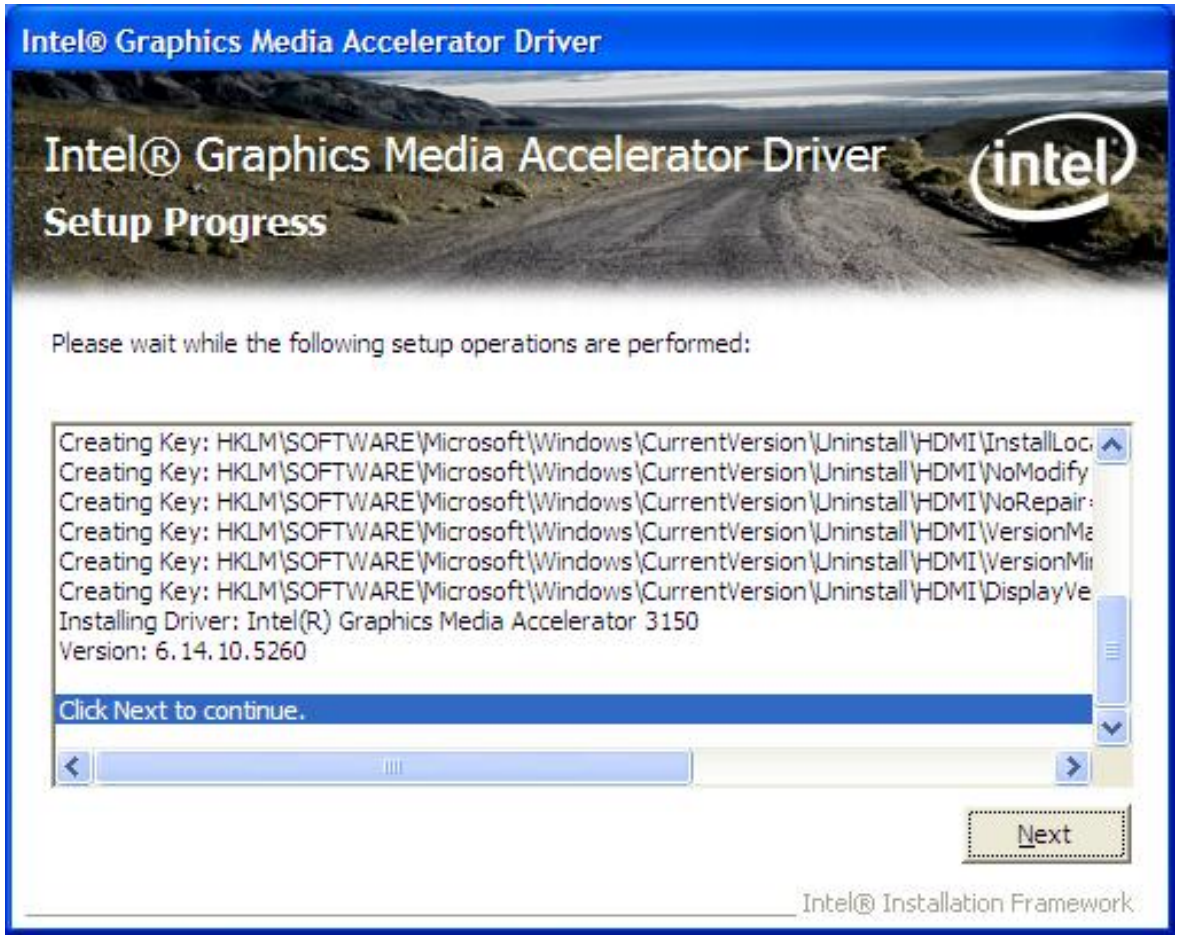
Step 4. Read the license agreement. Click **Yes** to accept the license agreement.


Intel® Graphics Media Accelerator Driver
Intel® Graphics Media Accelerator Driver
License Agreement
You must accept all of the terms of the license agreement in order to continue the setup program. Do you accept the terms?
INTEL SOFTWARE LICENSE AGREEMENT (OEM / IHV / ISV Distribution & Single User)
IMPORTANT - READ BEFORE COPYING, INSTALLING OR USING.
Do not use or load this software and any associated materials (collectively, the "Software") until you have carefully read the following terms and conditions. By loading or using the Software, you agree to the terms of this Agreement. If you do not wish to so agree, do not install or use the Software.
Please Also Note:
* If you are an Original Equipment Manufacturer (OEM), Independent Hardware Vendor (IHV), or Independent Software Vendor (ISV), this complete LICENSE AGREEMENT applies;
< Back
Yes
No
Intel® Installation Framework

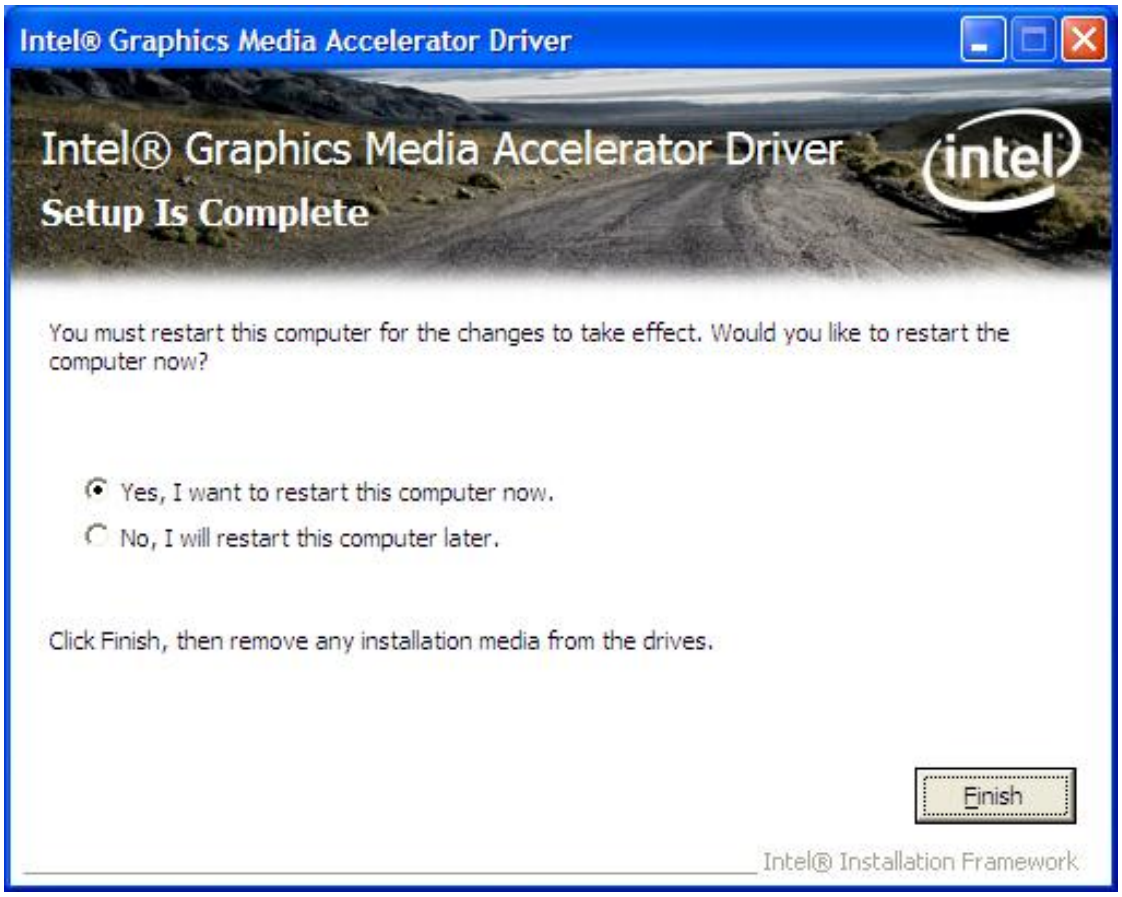
Step 5. Click **Next**.



Step 6. Click **Next** to continue.



Step 7. Select **Yes, I want to restart this computer now**. Click **Finish** then remove any installation media from the drives.

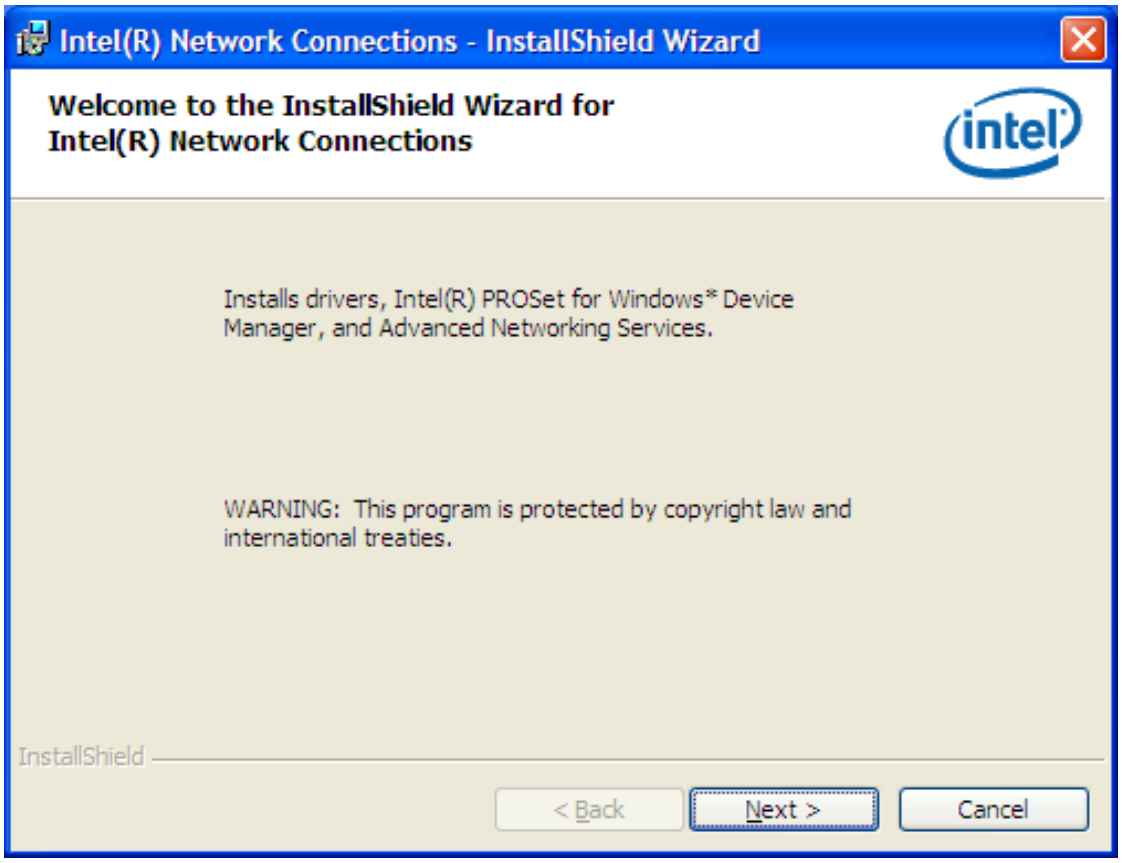

Intel® Graphics Media Accelerator Driver
Intel® Graphics Media Accelerator Driver
Setup Is Complete
intel
You must restart this computer for the changes to take effect. Would you like to restart the computer now?
Yes, I want to restart this computer now.
No, I will restart this computer later.
Click Finish, then remove any installation media from the drives.
Finish
Intel® Installation Framework

4.3 Intel 82574L Network adapter Driver

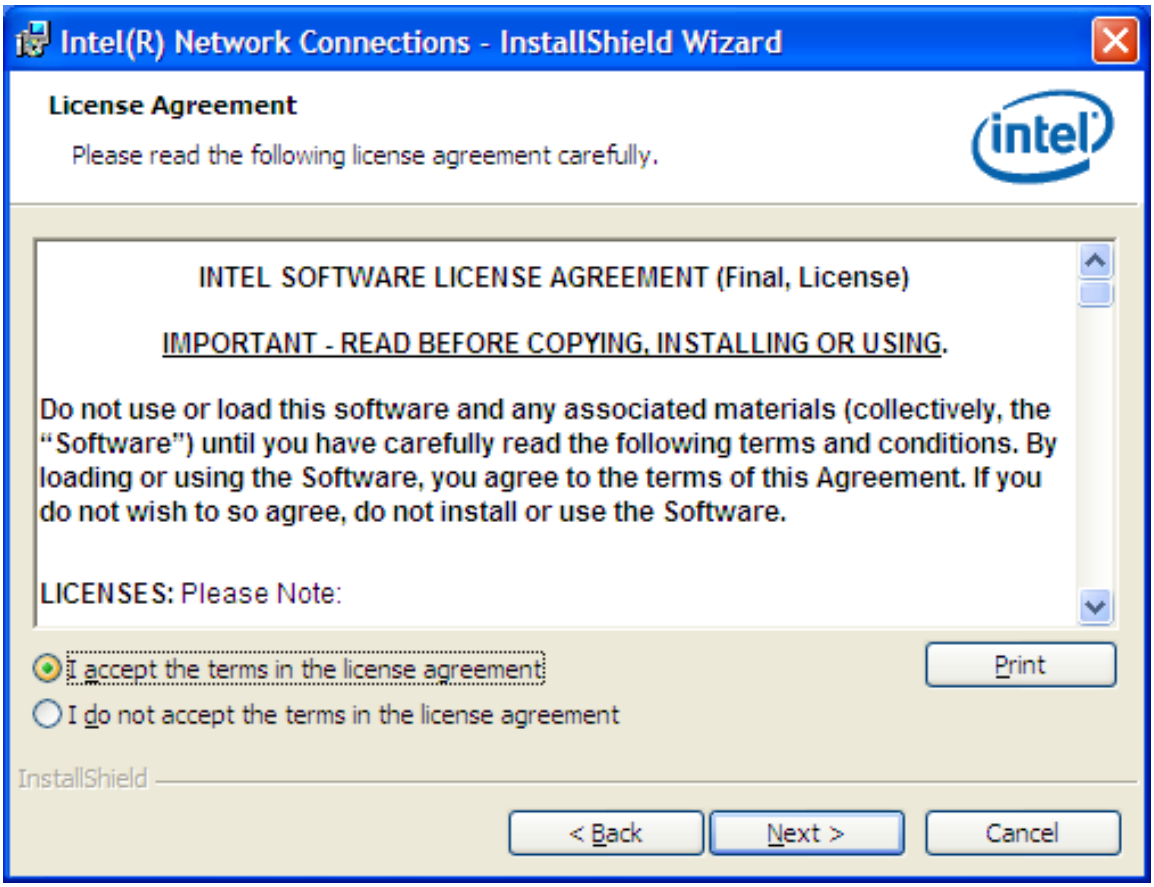
To install the Intel 82574L Network adapter Driver, please follow the steps below.

Step 1. Select **Intel(R) 82574L Network Adapter**.

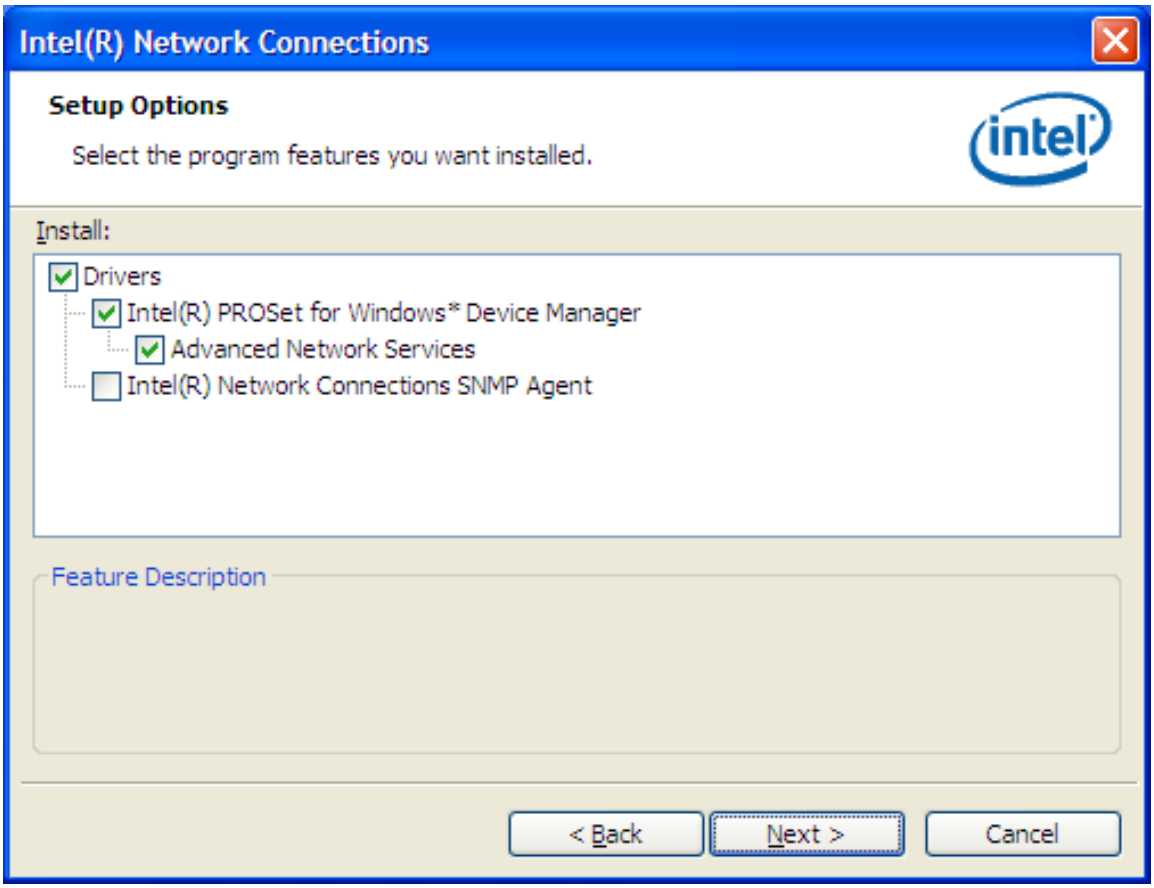
Step 2. Click **Next** to continue.


Intel(R) Network Connections - InstallShield Wizard
Welcome to the InstallShield Wizard for
Intel(R) Network Connections
intel
Installs drivers, Intel(R) PROSet for Windows* Device Manager, and Advanced Networking Services.
WARNING: This program is protected by copyright law and international treaties.
InstallShield
< Back
Next >
Cancel

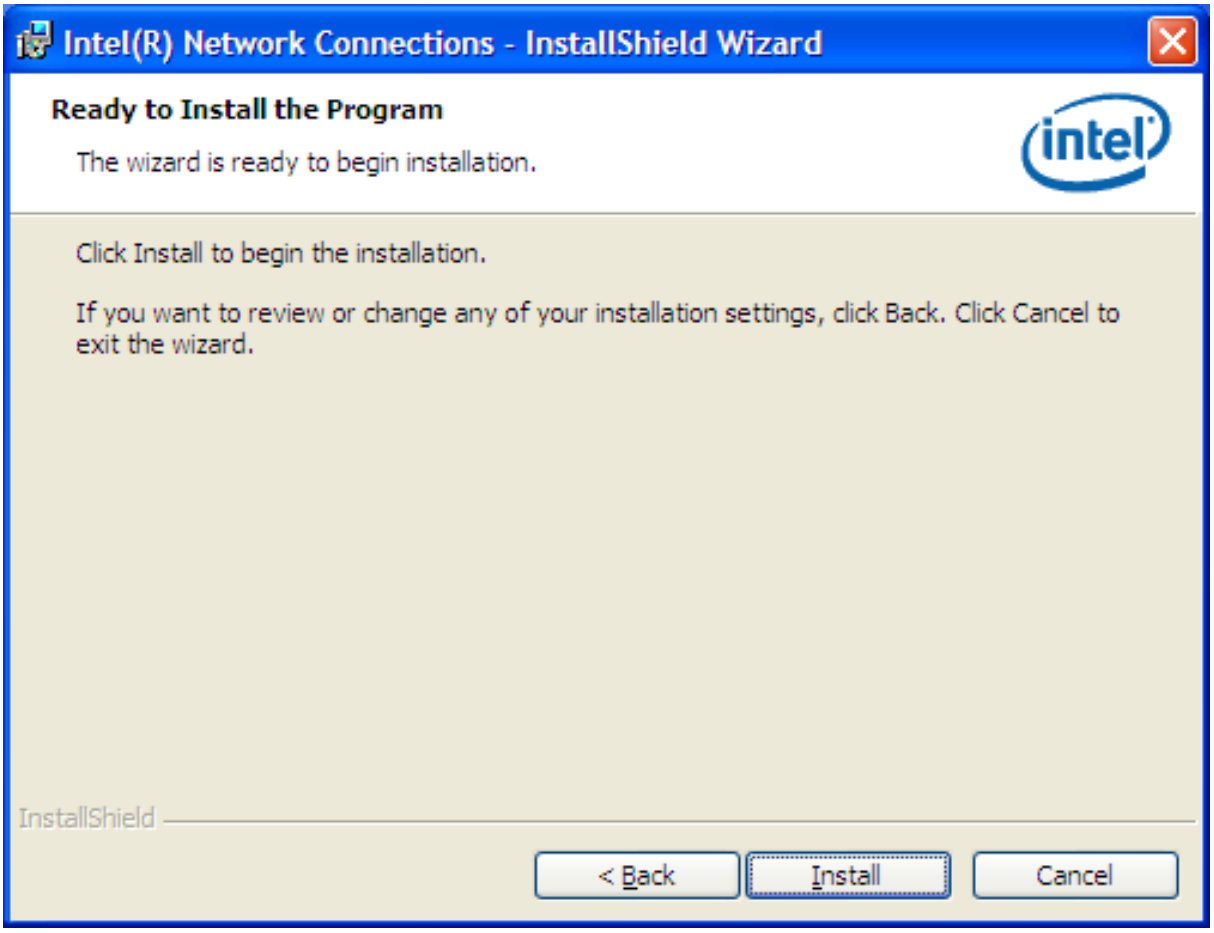
Step 3. Read the license agreement. Select **I accept the terms in the license agreement** then click **Next** to continue.


Intel(R) Network Connections - InstallShield Wizard
License Agreement
Please read the following license agreement carefully.
INTEL SOFTWARE LICENSE AGREEMENT (Final, License)
IMPORTANT - READ BEFORE COPYING, INSTALLING OR USING.
Do not use or load this software and any associated materials (collectively, the "Software") until you have carefully read the following terms and conditions. By loading or using the Software, you agree to the terms of this Agreement. If you do not wish to so agree, do not install or use the Software.
LICENSES: Please Note:
I accept the terms in the license agreement
I do not accept the terms in the license agreement
Print
InstallShield
< Back
Next >
Cancel

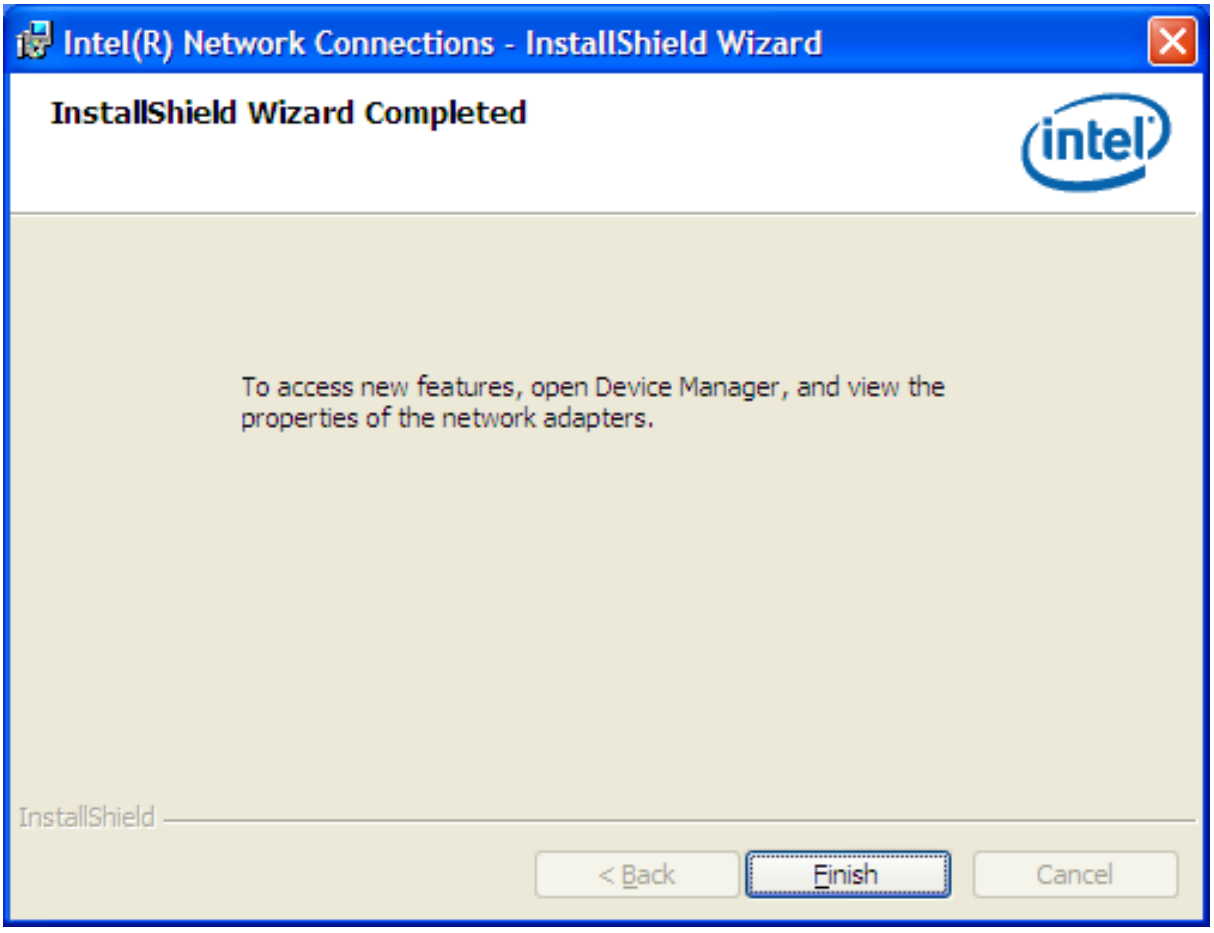
Step 4. Select **Drivers, Intel(R) PROSet for Windows* Device Manager, Advanced Network Services**. Click **Next** to continue.



Step 5. Click **Install** to begin the installation.


Intel(R) Network Connections - InstallShield Wizard
Ready to Install the Program
The wizard is ready to begin installation.
Click Install to begin the installation.
If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.
InstallShield
< Back
Install
Cancel

Step 6. Click **Finish** to compete the installation.

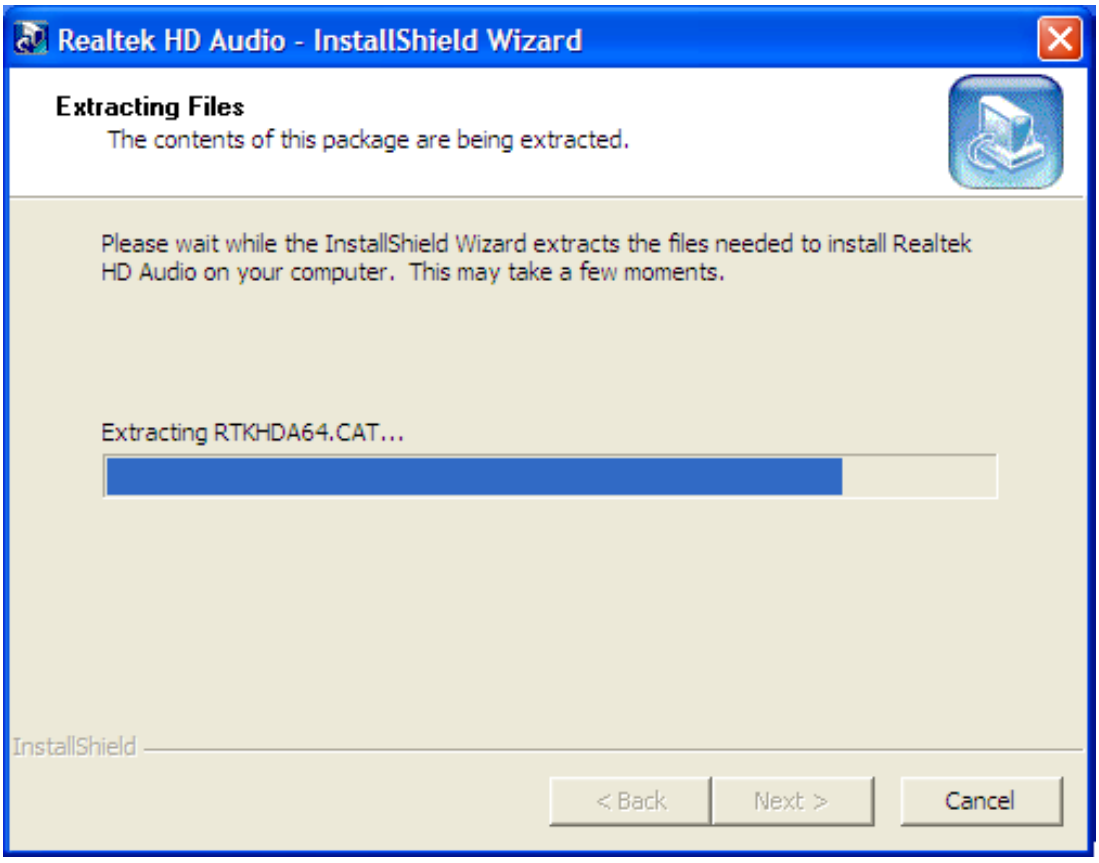

Intel(R) Network Connections - InstallShield Wizard
InstallShield Wizard Completed
To access new features, open Device Manager, and view the properties of the network adapters.
InstallShield
< Back
Finish
Cancel

4.4 Realtek HD Audio Driver Installation

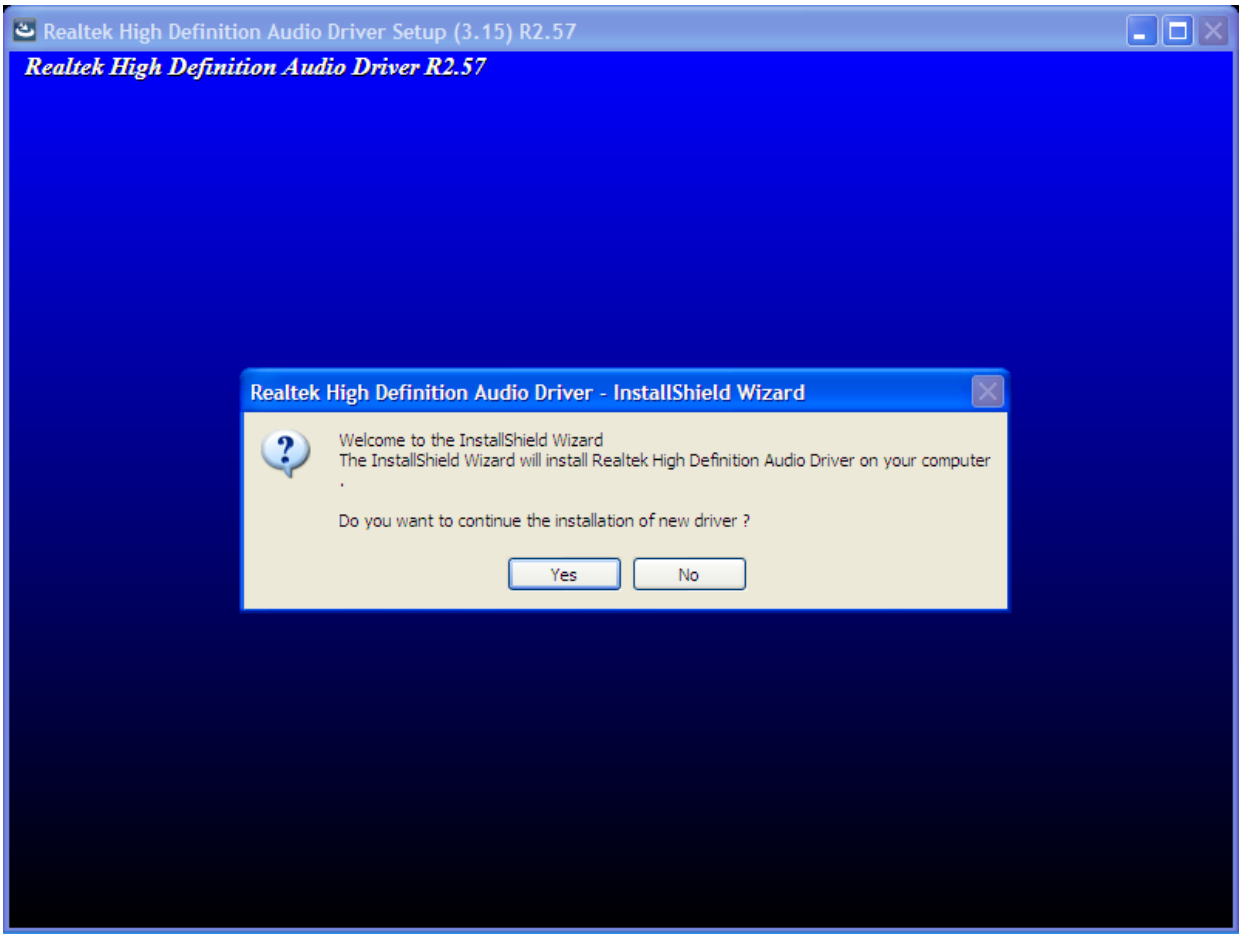
To install the Realtek High Definition (HD) Audio driver, please follow the steps below.

Step 1. Select **Realtek ALC662 HD Audio Driver** from the list.

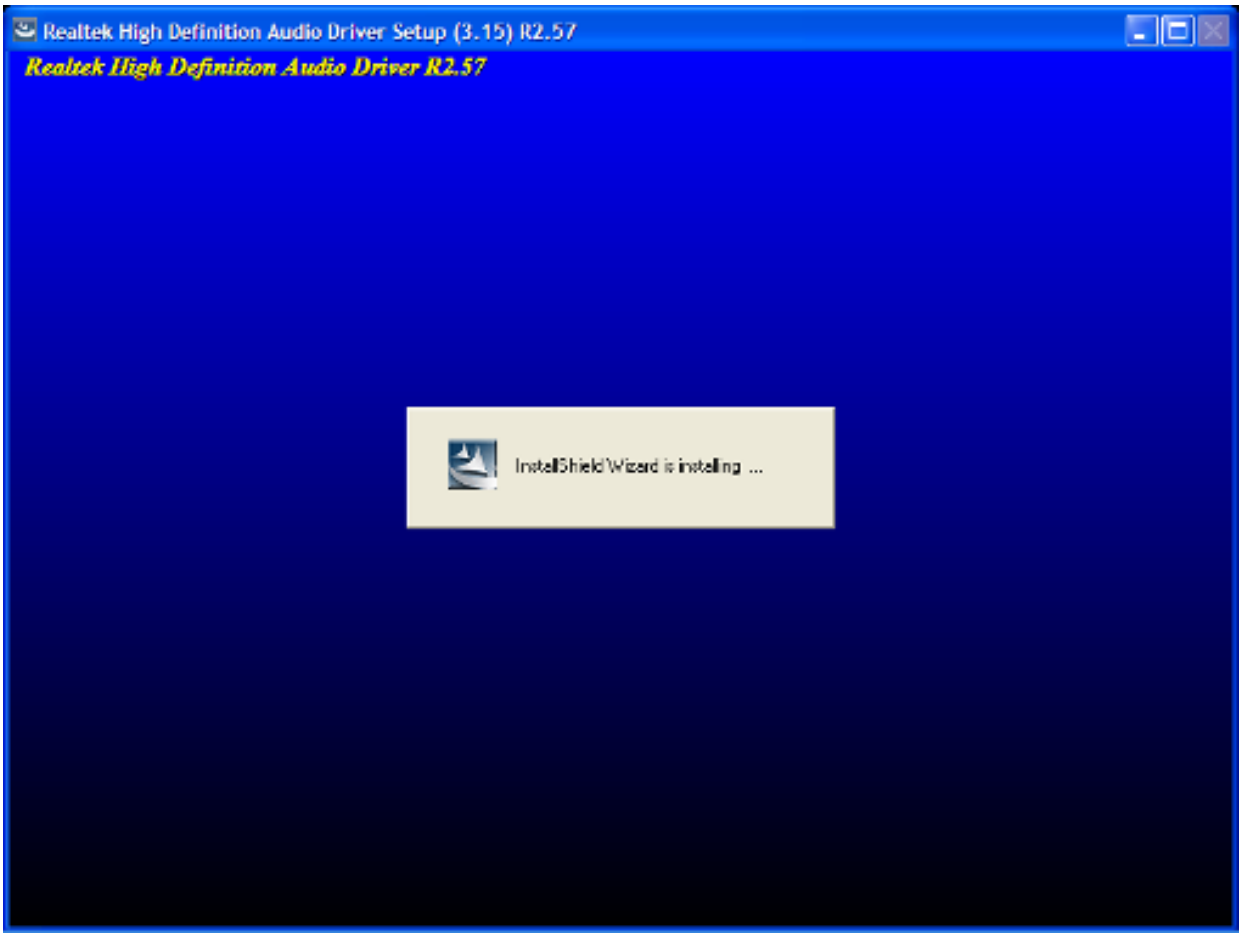
Step 2. Wait for extracting the files then click **Next** to continue.


Realtek HD Audio - InstallShield Wizard
Extracting Files
The contents of this package are being extracted.
Please wait while the InstallShield Wizard extracts the files needed to install Realtek HD Audio on your computer. This may take a few moments.
Extracting RTKHDA64.CAT...
InstallShield
< Back
Next >
Cancel

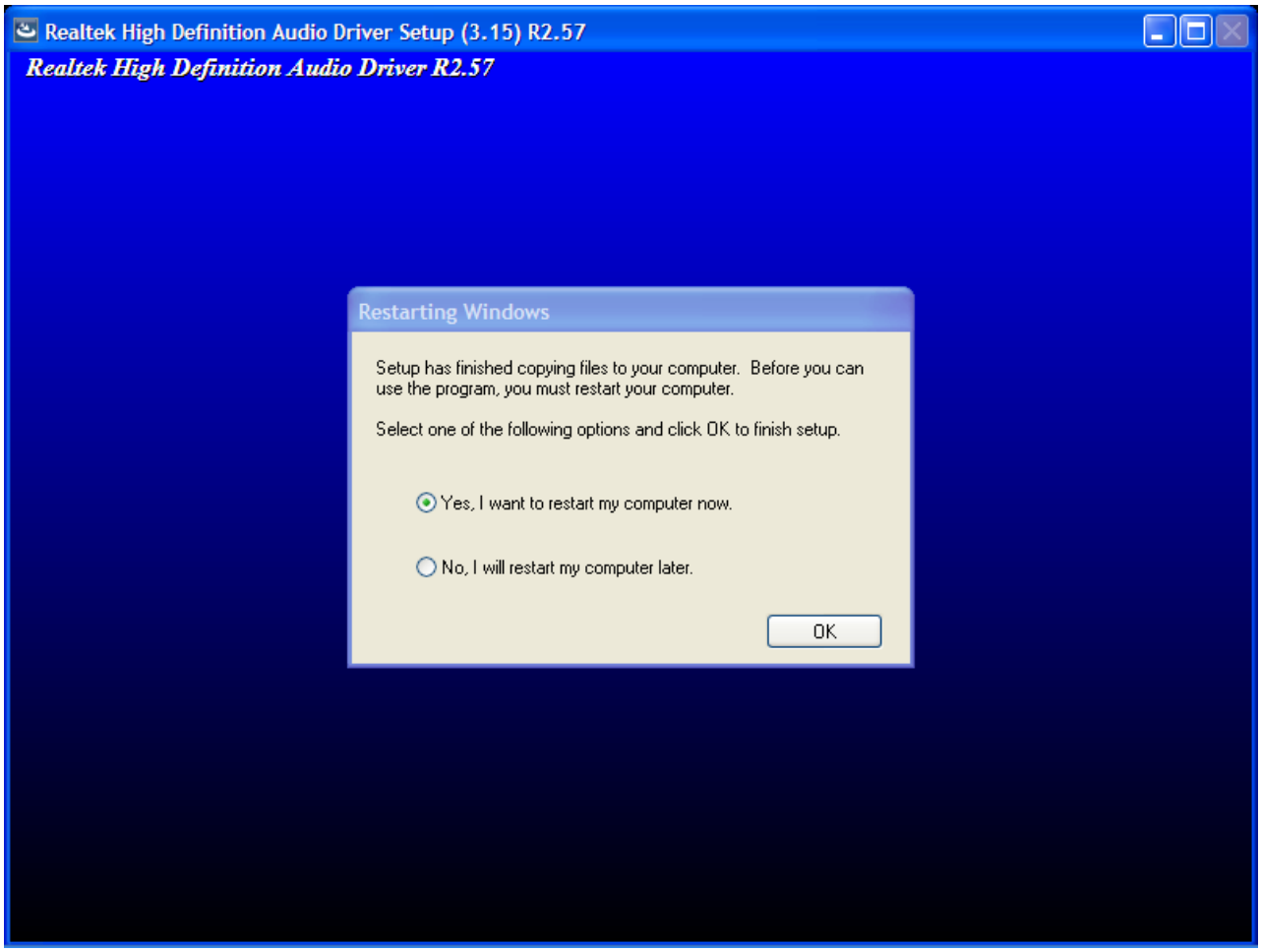
Step 3. Click **Yes** to continue the installation.


Realtek High Definition Audio Driver Setup (3.15) R2.57
Realtek High Definition Audio Driver R2.57
Realtek High Definition Audio Driver - InstallShield Wizard
Welcome to the InstallShield Wizard
The InstallShield Wizard will install Realtek High Definition Audio Driver on your computer .
Do you want to continue the installation of new driver ?
Yes
No

Step 4. Wait for installation.


Realtek High Definition Audio Driver Setup (3.15) R2.57
Realtek High Definition Audio Driver R2.57
InstallShield Wizard is installing ...

Step 5. Select **Yes, I want to restart my computer now**. then click **OK**.


Realtek High Definition Audio Driver Setup (3.15) R2.57
Realtek High Definition Audio Driver R2.57
Restarting Windows
Setup has finished copying files to your computer. Before you can use the program, you must restart your computer.
Select one of the following options and click OK to finish setup.
Yes, I want to restart my computer now.
No, I will restart my computer later.
OK

Chapter 5 Touch Screen Installation

This chapter describes how to install drivers and other software that will allow your Touch Screen Controller Board to work with different operating systems.

5.1 Introduction to Touch Screen Controller Board

15” projected capacitive touch panel control board is a touch screen control board designed for USB interface and specific for touch screens. It is designed with USB interface features with multiple devices supporting function. It is designed for Projected Capacitive Touch Panel (PCAP) application; through glass touch sensing is ready for products that require a complete flat surface. It also can drive the touch panel to get two fingers touch function that based on the Windows 7 support.

Figure 5.1: Bird’s Eye View of Control Board

5.2 Windows 2000/XP/2003/Vista Universal Driver Installation

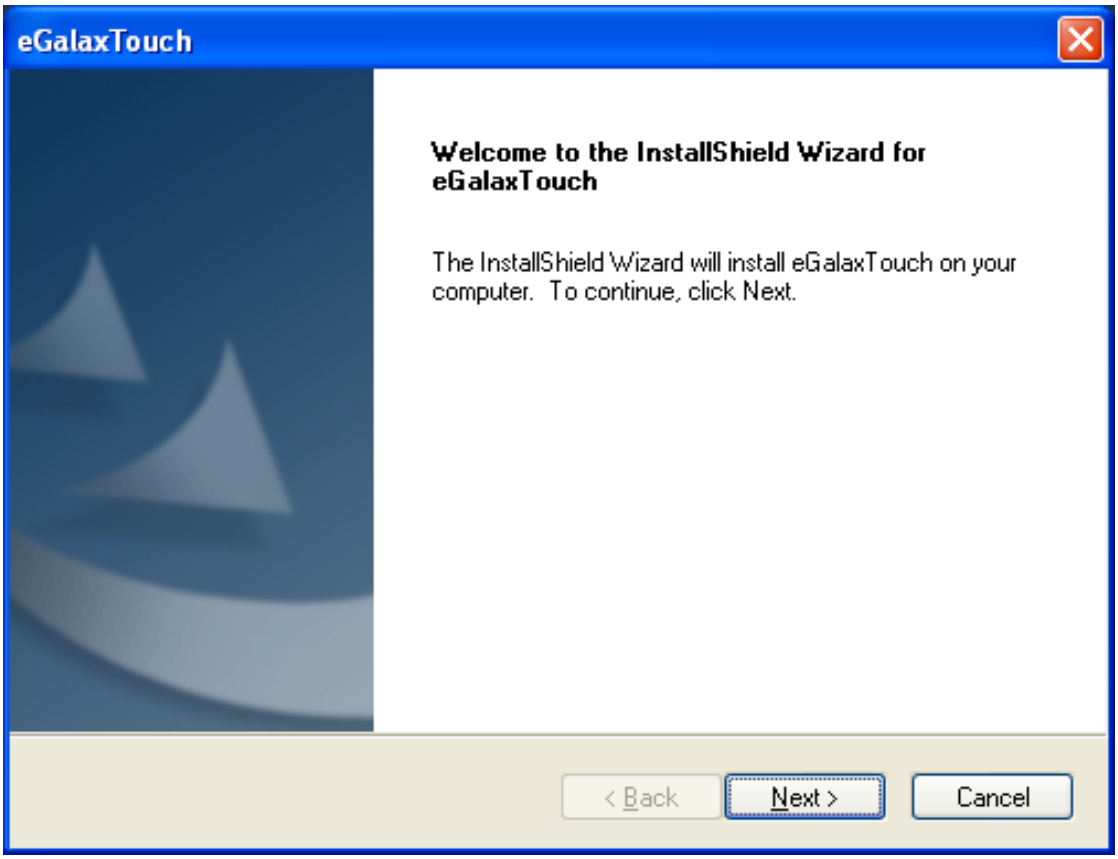
Before installing the Windows 2000/XP driver software, you must have the Windows 2000/XP system installed and running on your computer.

5.2.1 Installing Software

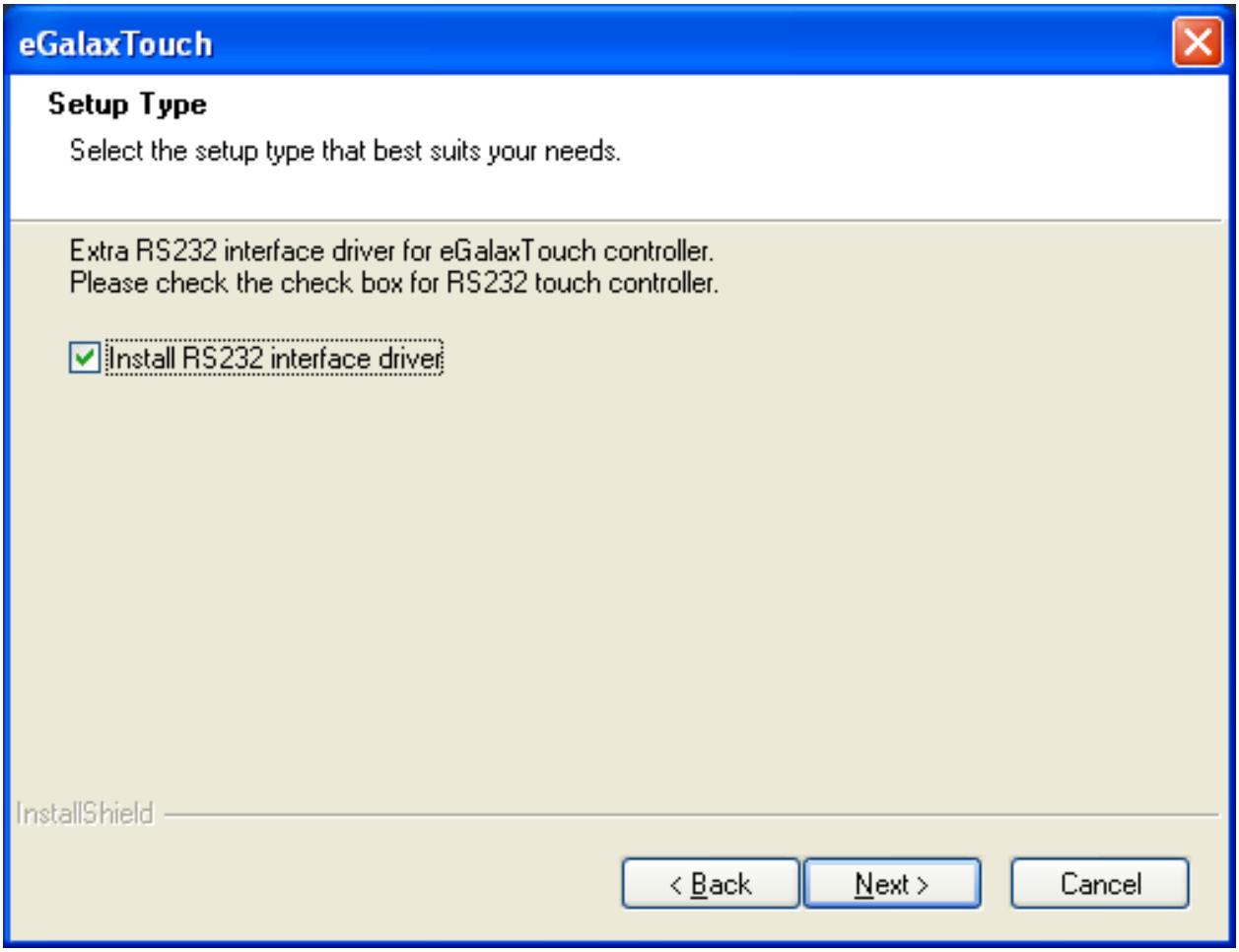
If you have an older version of the driver installed in your system, please remove it first. Follow the steps below to install the driver. Please make sure your USB controller device had plugged in advance. When the system first detects the controller board, a screen appears that shows “Unknown Device”. Do not use this hardware wizard. Press Cancel.

Insert the Aplex product CD install **setup.exe.** the screen below would appear. Click **touch panel driver.**

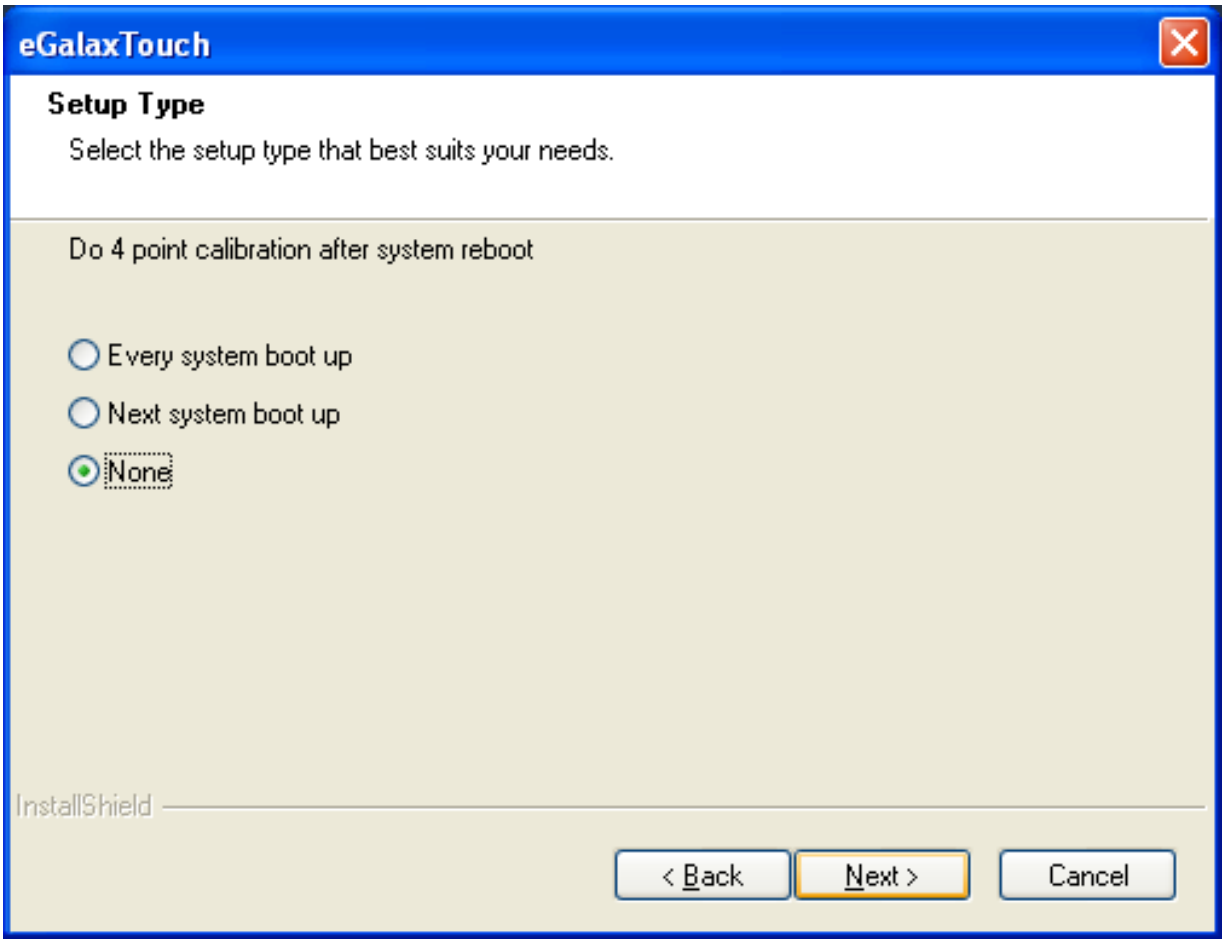
Step 3. Click **Next** to continue.


eGalaxTouch
Welcome to the InstallShield Wizard for eGalaxTouch
The InstallShield Wizard will install eGalaxTouch on your computer. To continue, click Next.
< Back
Next >
Cancel

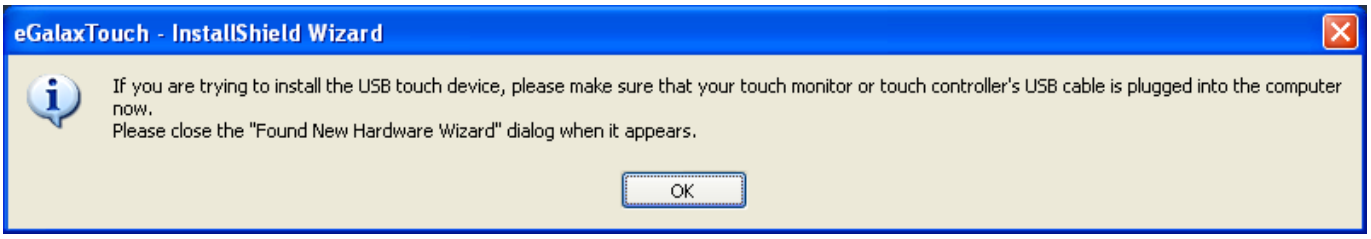
Step 4. Tick **Install RS232 interface driver**.


eGalaxTouch
Setup Type
Select the setup type that best suits your needs.
Extra RS232 interface driver for eGalaxTouch controller.
Please check the check box for RS232 touch controller.
Install RS232 interface driver
InstallShield
< Back
Next >
Cancel

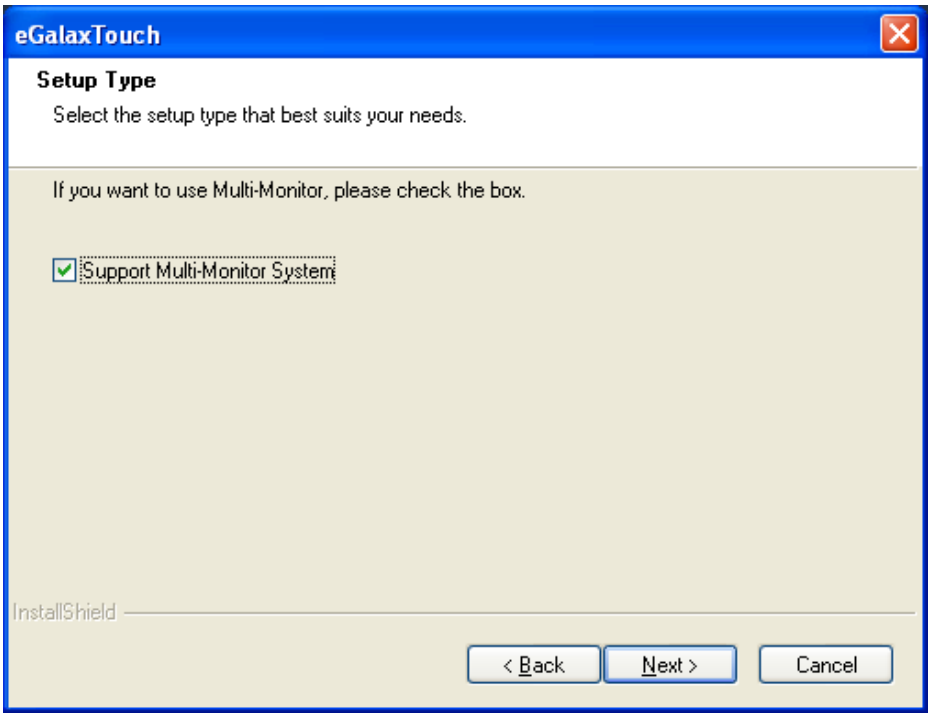
Step 5. Select None. Then click **Next** to continue.



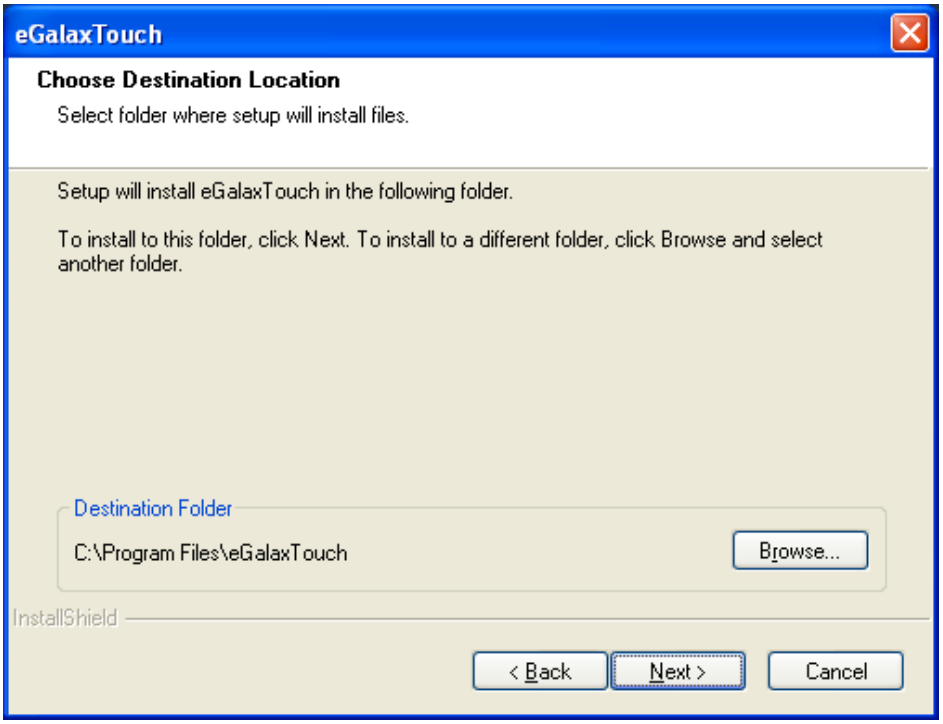
Step 6. Please make sure your touch monitor or touch controller's USB cable is plugged into the computer now. Click **OK** to continue the installation.


eGalaxTouch - InstallShield Wizard
If you are trying to install the USB touch device, please make sure that your touch monitor or touch controller's USB cable is plugged into the computer now.
Please close the "Found New Hardware Wizard" dialog when it appears.
OK

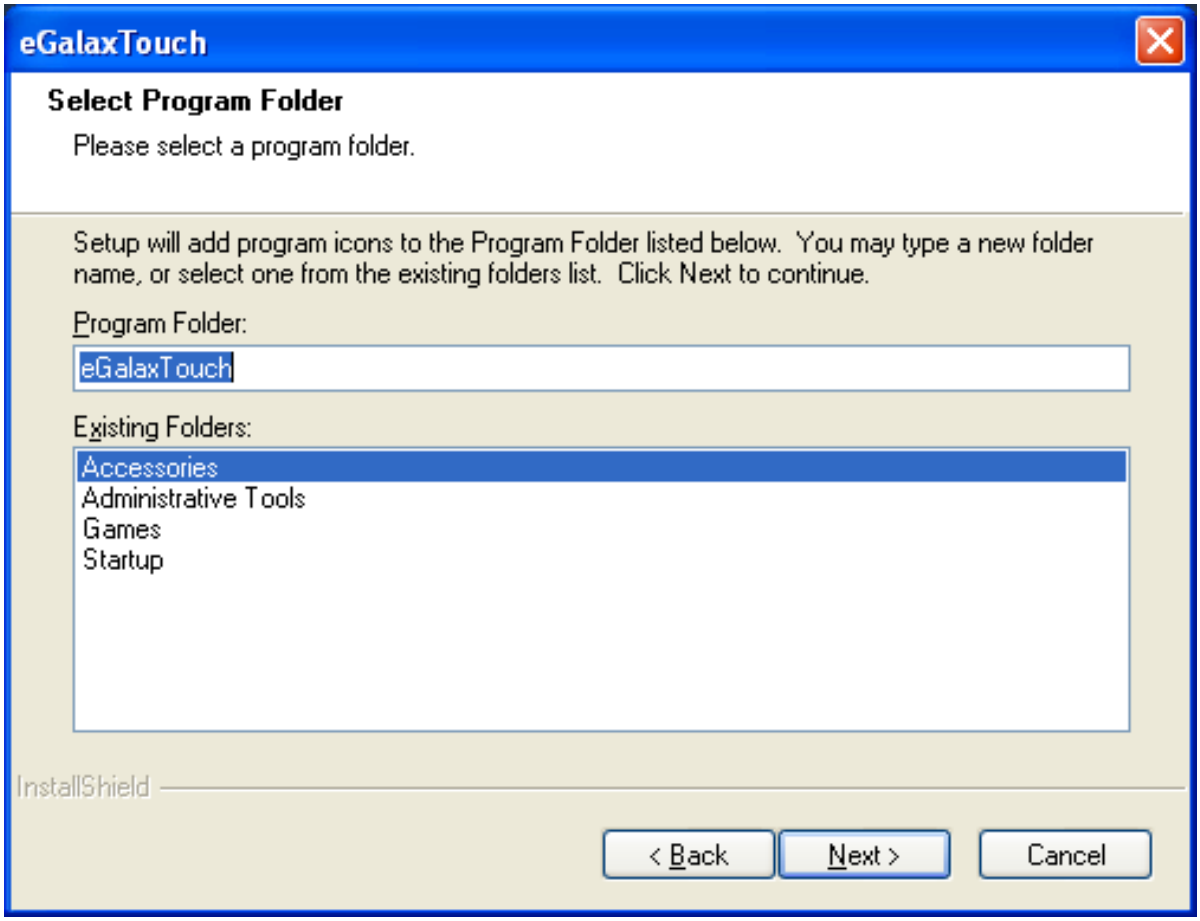
Step 7. If you want to use Multi-Monitor, check **Support Multi-Monitor System**. Then, click **Next** to continue the installation.



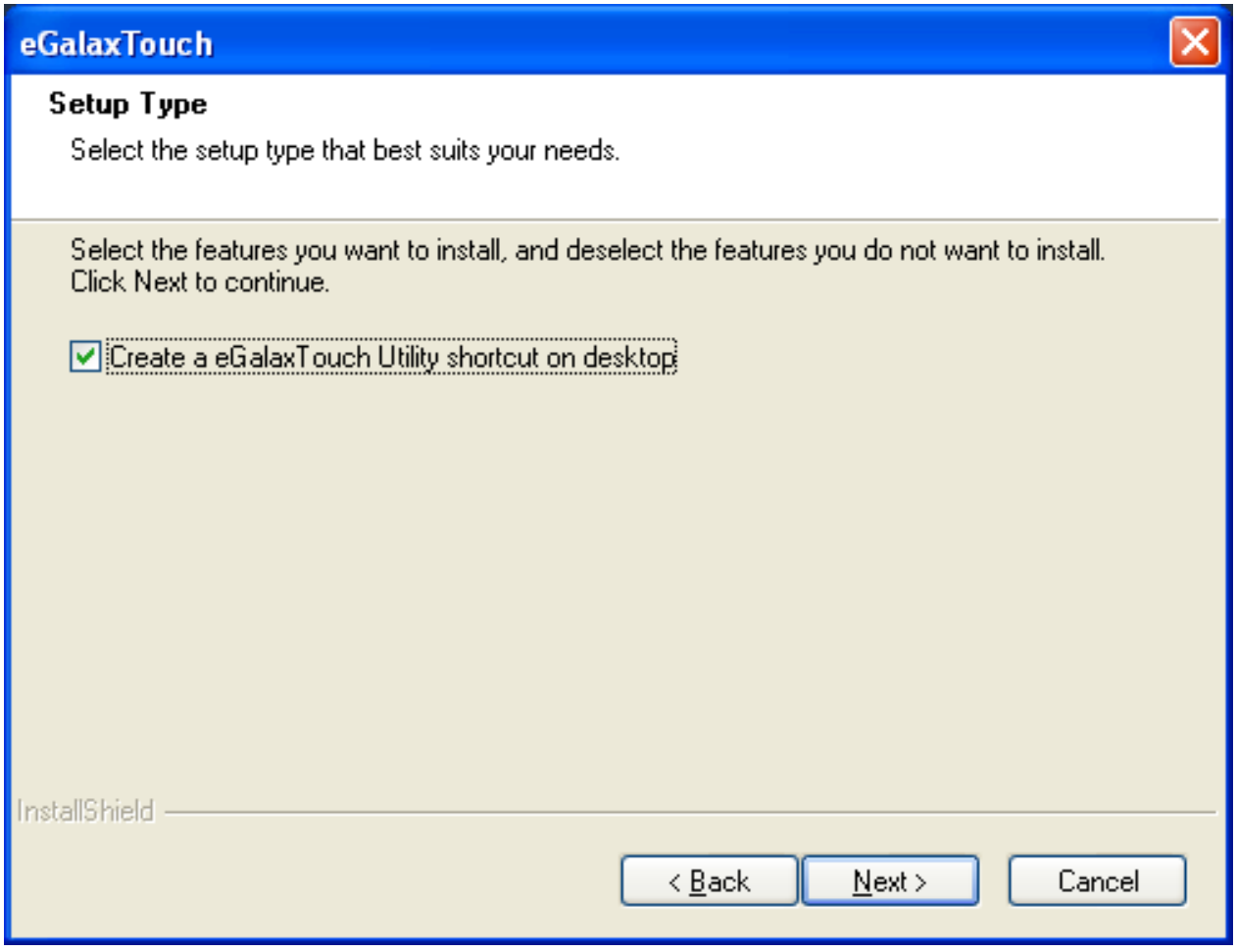
Step 8. Click **Browse** to create a new folder. Click **Next** to setup eGalaxTouch in the destination folder you want to install. Click **Next** to continue the installation.


eGalaxTouch
Choose Destination Location
Select folder where setup will install files.
Setup will install eGalaxTouch in the following folder.
To install to this folder, click Next. To install to a different folder, click Browse and select another folder.
Destination Folder
C:\Program Files\eGalaxTouch
Browse...
InstallShield
< Back
Next >
Cancel

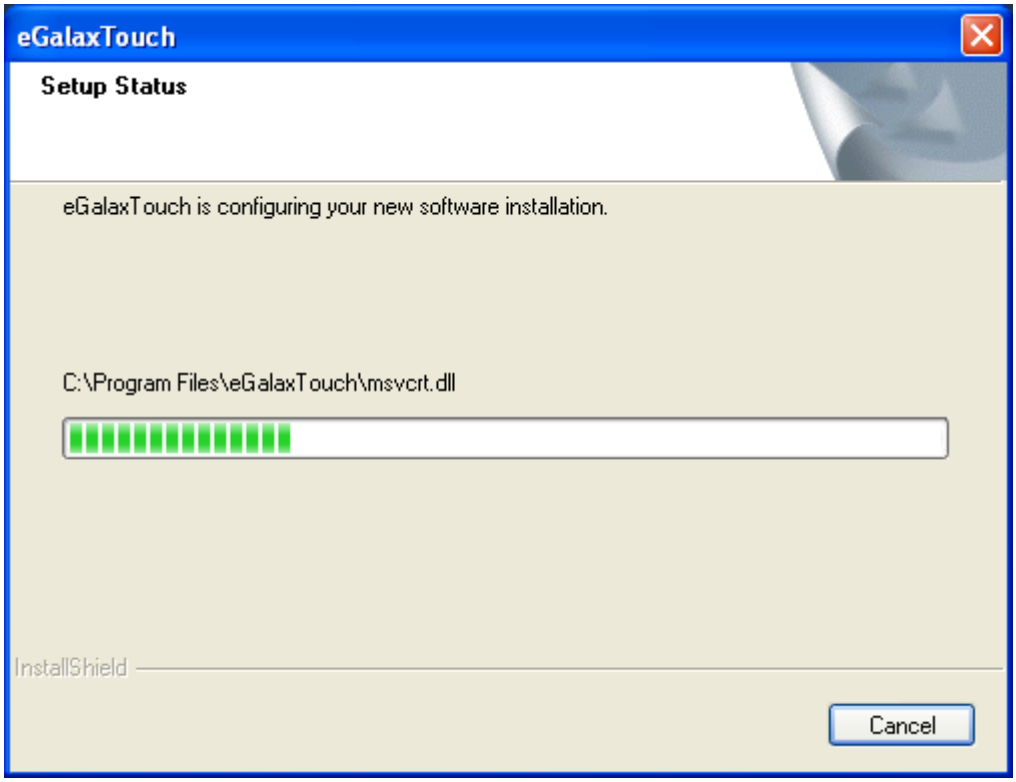
Step 9. Under eGalaxTouch, select **Accessories**.



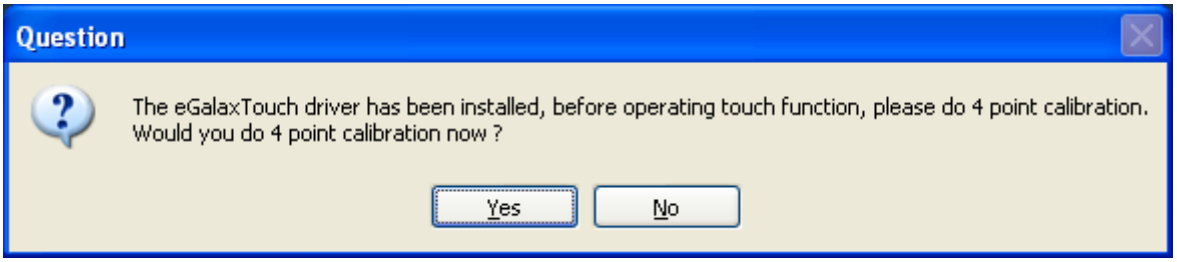
Step 10. Check **Create a eGalaxTouch Utility shortcut on desktop**. Click **Next** to continue.


eGalaxTouch
Setup Type
Select the setup type that best suits your needs.
Select the features you want to install, and deselect the features you do not want to install. Click Next to continue.
Create a eGalaxTouch Utility shortcut on desktop
InstallShield
< Back
Next >
Cancel

Step 11. The installation files are extracted.



Step 12. eGalaxTouch driver has been installed. To do 4 point calibration, click **Yes** to continue.

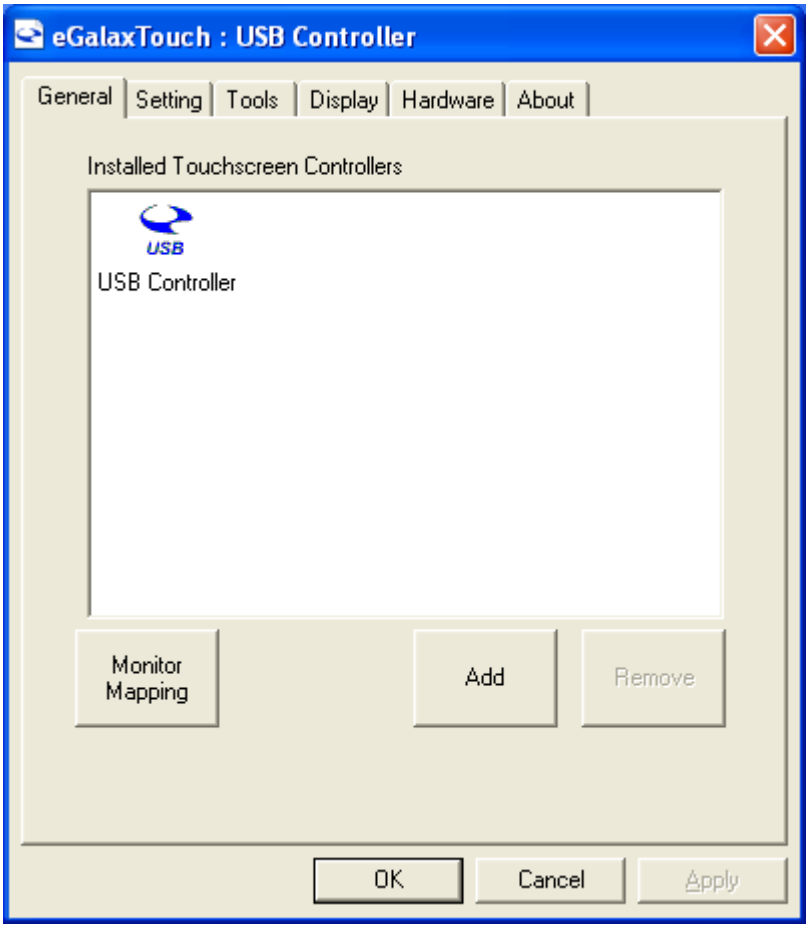

Question
The eGalaxTouch driver has been installed, before operating touch function, please do 4 point calibration.
Would you do 4 point calibration now ?
Yes
No

5.2.2 Software Functions(Projected Capacitive)

Upon rebooting, the computer automatically finds the eGalax controller board. The touch screen is connected but not calibrated. Follow the procedures below to carry out calibration.

General

In this window, you can see there is USB Controller. Click **OK** to continue.



Monitor Mapping

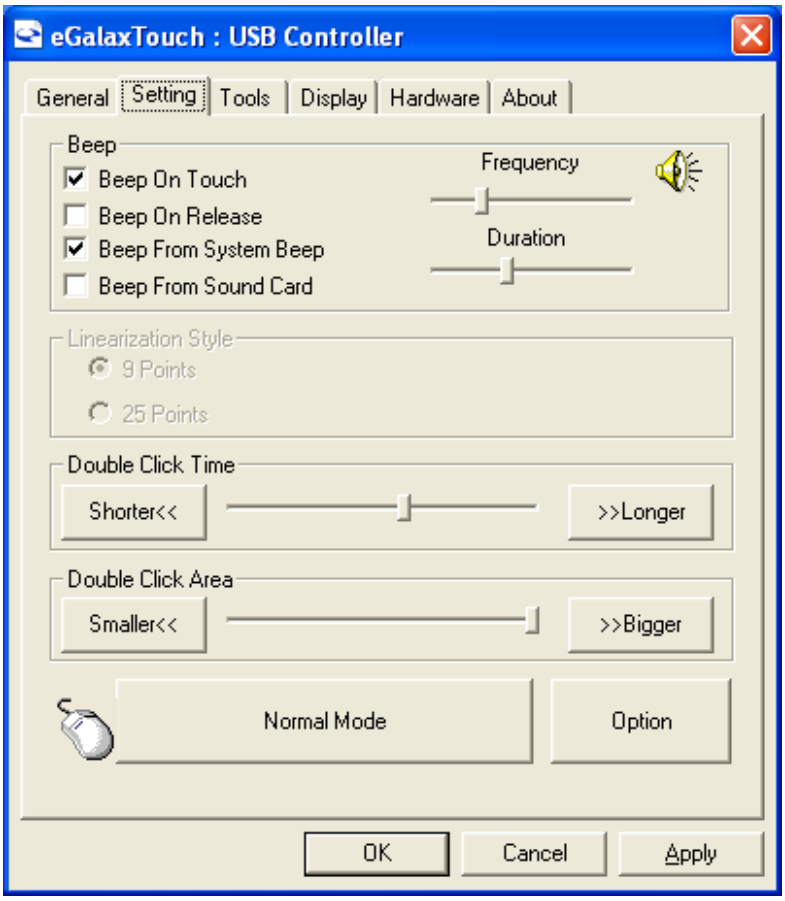
to adjust touch panel

Add

to search for device

Setting

Click **OK** to continue settings.



Beep

Beep On Touch

Beep On Release

Beep From System Beep

Beep From Sound Card

Linearization Style

9 points

25 points

Double Click Time

Shorter

Longer

Double Click Area

Smaller

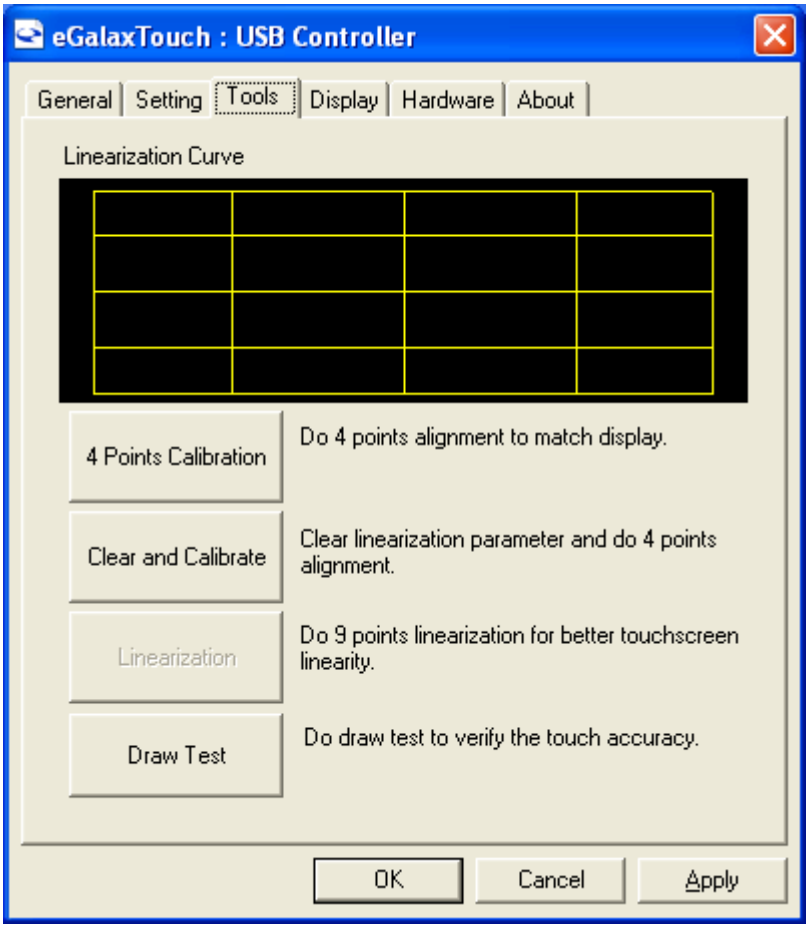
Bigger

Normal mode

Simulate the mouse mode

Tools

Click **OK** to continue the settings.



4 Points Calibration

Do 4 points alignment to match display.

Clear and Calibrate

Clear linearization parameter and do 4 points alignment.

Linearization

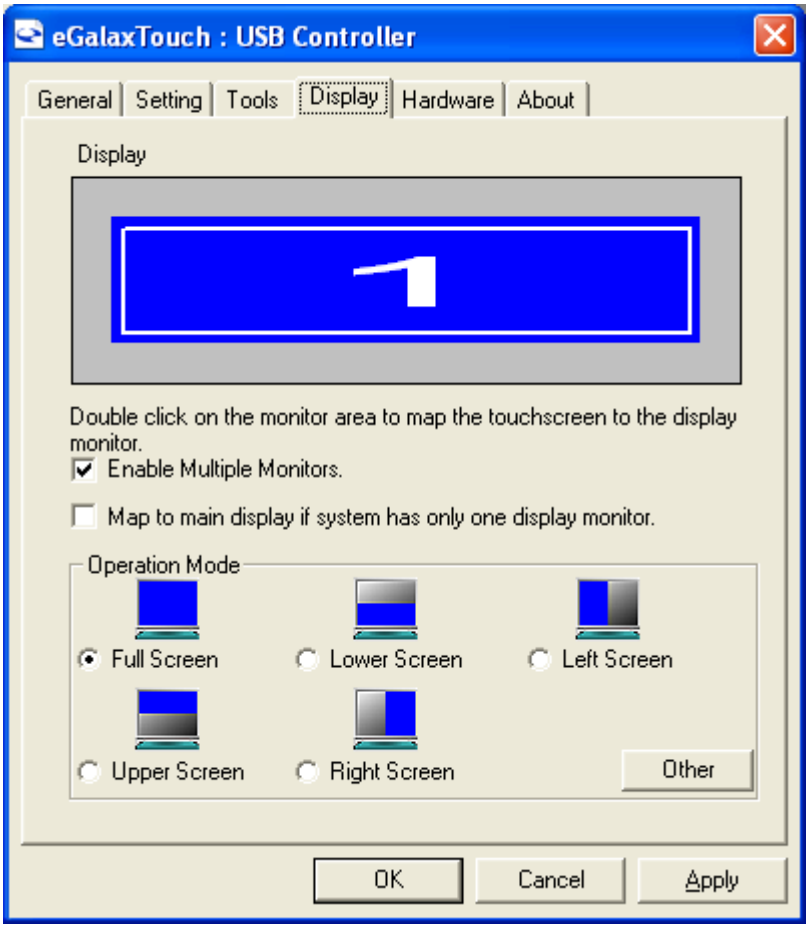
Do 9 points linearization for better touchscreen linearity.

Draw Test

Do draw test to verify the touch accuracy.

Display

In this window, it shows the mode of display.



Enable Multiple Monitors.

Map to main display if system has only one display monitor

Full Screen

Lower Screen

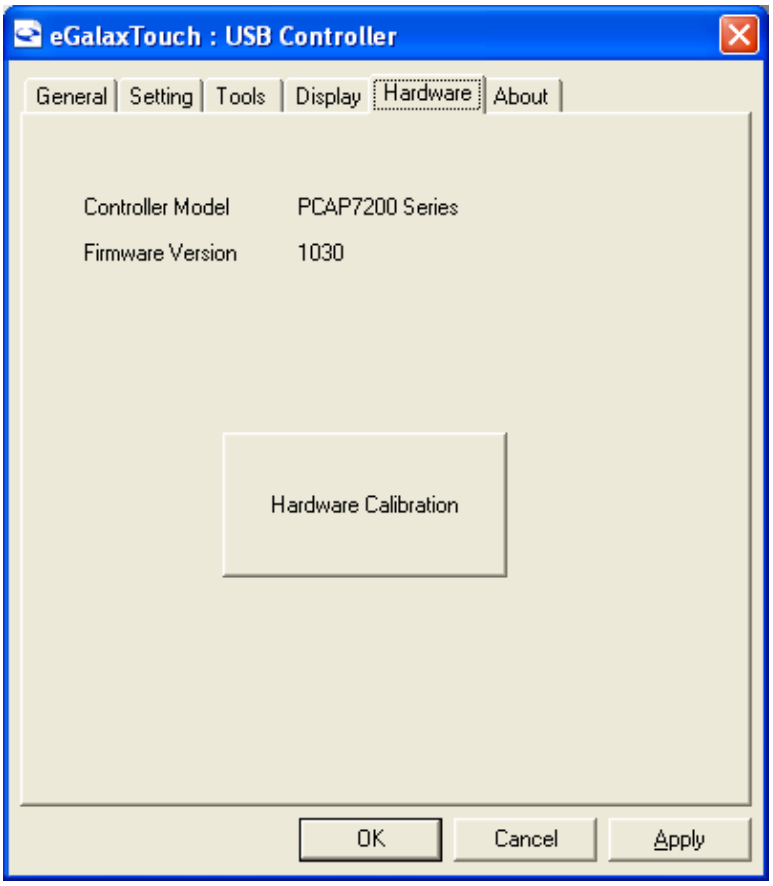
Left Screen

Upper Screen

Right Screen

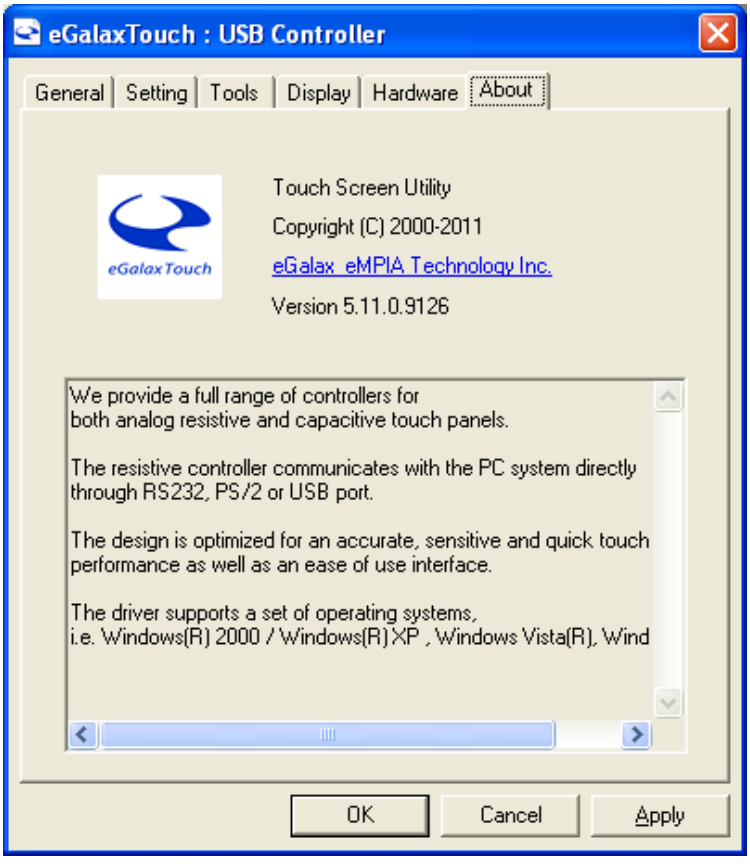
Hardware

Click **OK** to continue.



About

To display information about eGalaxTouch and its version.


eGalaxTouch : USB Controller
General
Setting
Tools
Display
Hardware
About
eGalaxTouch
Touch Screen Utility
Copyright (C) 2000-2011
eGalax_eMPIA Technology Inc.
Version 5.11.0.9126
We provide a full range of controllers for
both analog resistive and capacitive touch panels.
The resistive controller communicates with the PC system directly
through RS232, PS/2 or USB port.
The design is optimized for an accurate, sensitive and quick touch
performance as well as an ease of use interface.
The driver supports a set of operating systems,
i.e. Windows(R) 2000 / Windows(R) XP , Windows Vista(R), Wind
OK
Cancel
Apply

5.2.3 Software Functions (Resistive Touch)

Upon rebooting, the computer automatically finds the new 6000 controller board. The touch screen is connected but not calibrated. Follow the procedures below to carry out calibration.

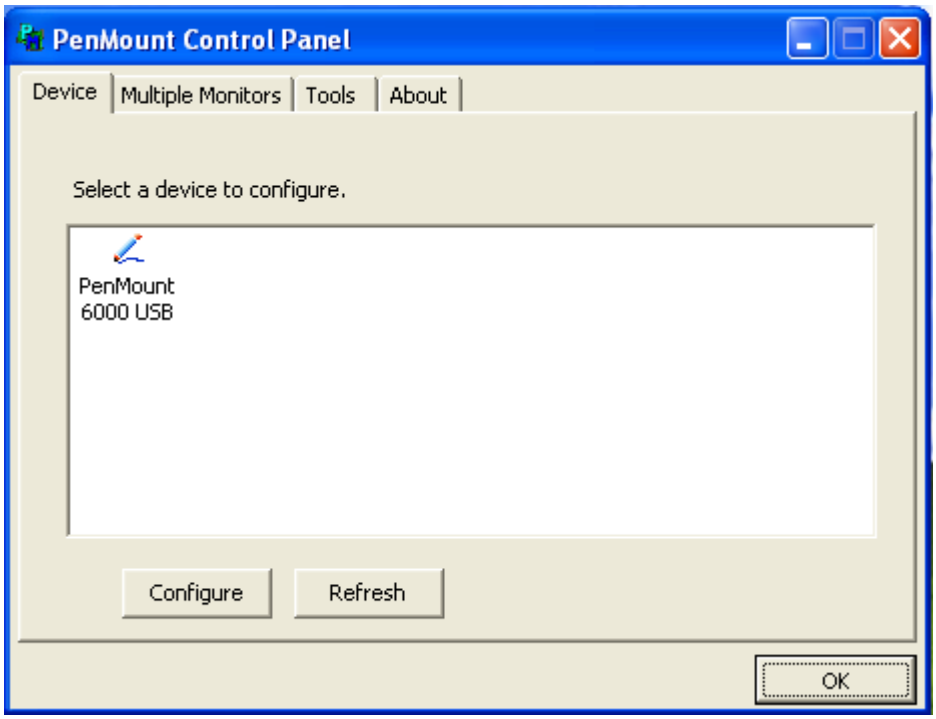
1. After installation, click the PenMount Monitor icon “PM” in the menu bar.
2. When the PenMount Control Panel appears, select a device to “Calibrate.”

PenMount Control Panel

The functions of the PenMount Control Panel are **Device, Multiple Monitors** ,**Tools** and **About**, which are explained in the following sections.

Device

In this window, you can find out that how many devices be detected on your system.



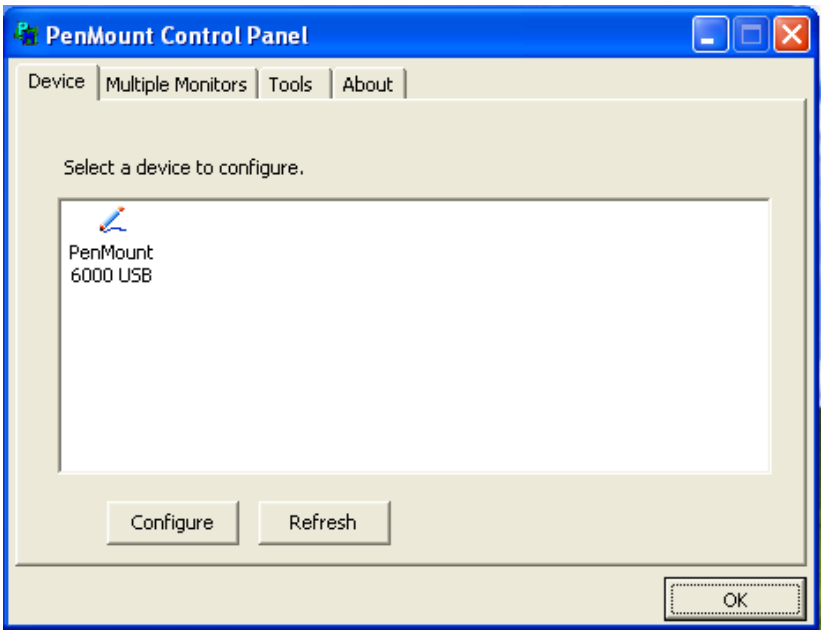
Calibrate

This function offers two ways to calibrate your touch screen. ‘Standard Calibration’ adjusts most touch screens. ‘Advanced Calibration’ adjusts aging touch screens.

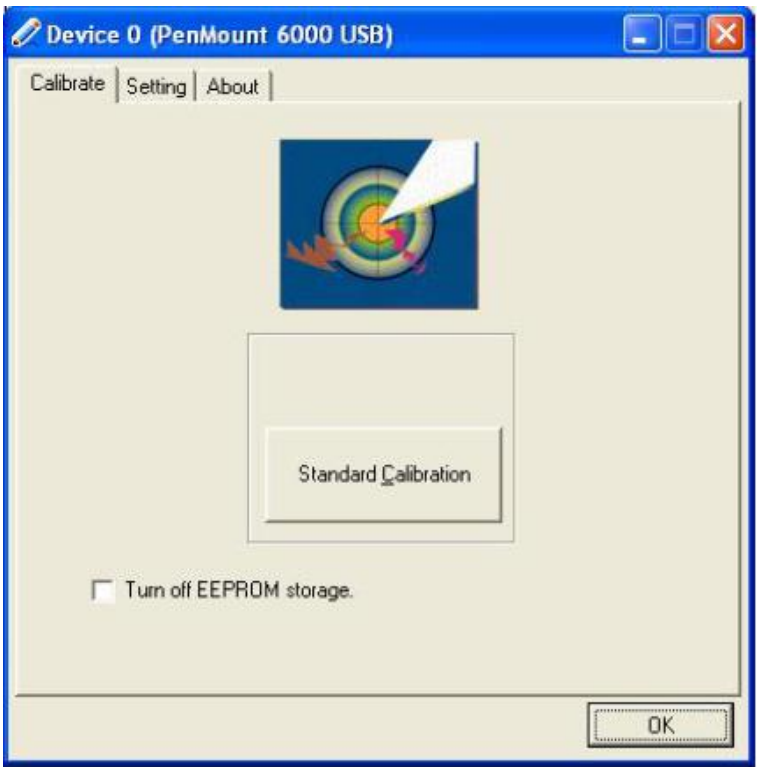
Standard Calibration	**Click this button and arrows appear pointing to red squares. Use your finger or stylus to touch the red squares in sequence. After the fifth red point calibration is complete. To**

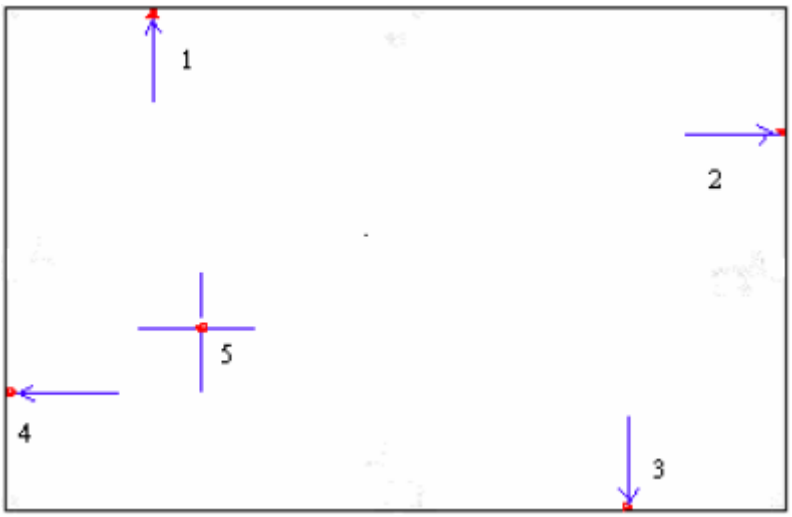
	skip, press 'ESC'.
Advanced Calibration	**Advanced Calibration uses 4, 9, 16 or 25 points to effectively calibrate touch panel linearity of aged touch screens. Click this button and touch the red squares in sequence with a stylus. To skip, press ESC'.**
Command Calibration	**Command call calibration function. Use command mode call calibration function, this can uses Standard, 4, 9, 16 or 25 points to calibrate** E.g. Please run ms-dos prompt or command prompt c:\Program Files\PenMount Universa Driver\Dmcctrl.exe -calibration 0 (Standard Calibration) Dmcctrl.exe -calibration ($) 0= Standard Calibration 4=Advanced Calibration 4 9=Advanced Calibration 9 16=Advanced Calibration 16 25=Advanced Calibration 25

Step 1. Please select a device then click "Configure". You can also double click the device too.



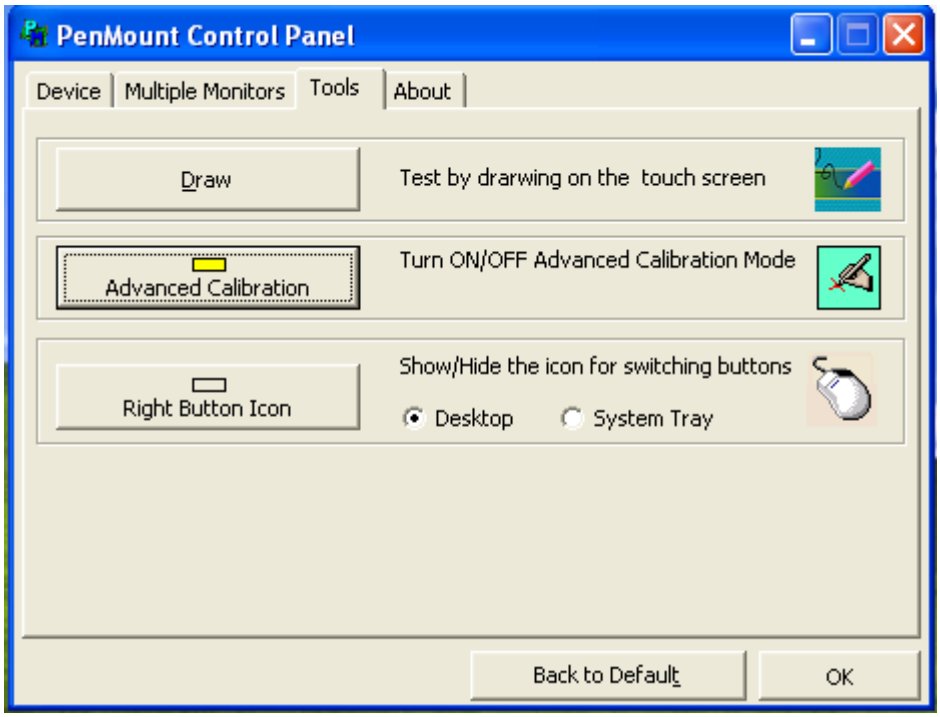
Step 2. Click “Standard Calibration” to start calibration procedure



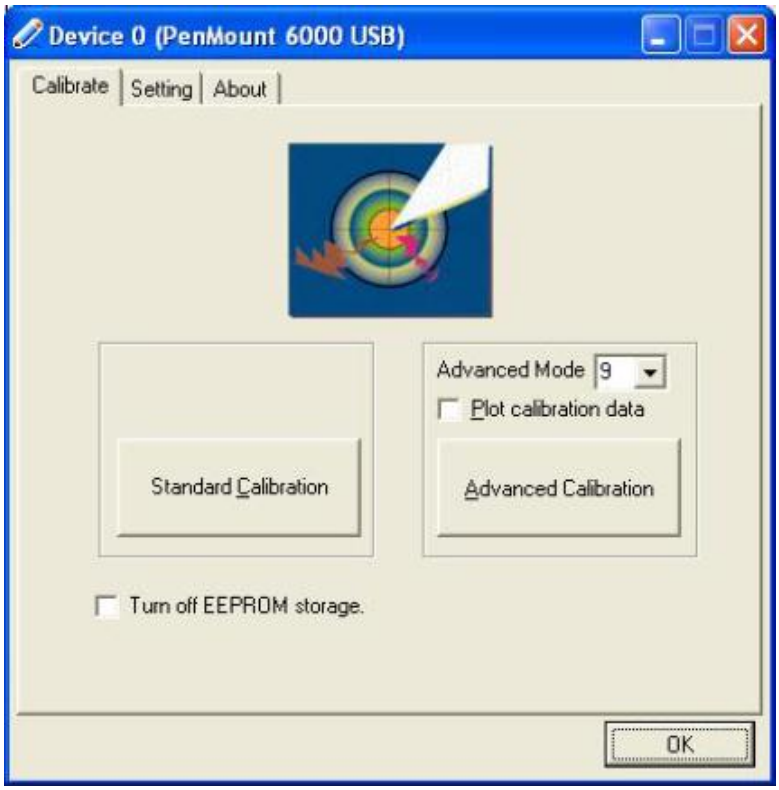


NOTE: The older the touch screen, the more Advanced Mode calibration points you need for an accurate calibration. Use a stylus during Advanced Calibration for greater accuracy. Please follow the step as below:

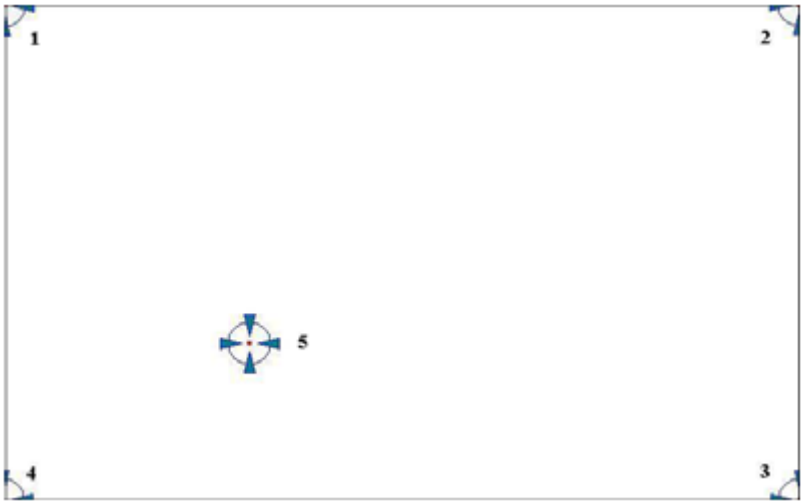
Step 3. Come back to “PenMount Control Panel” and select **Tools** then click **Advanced Calibration**.



Step 4. Select **Device** to calibrate, then you can start to do **Advanced Calibration**.



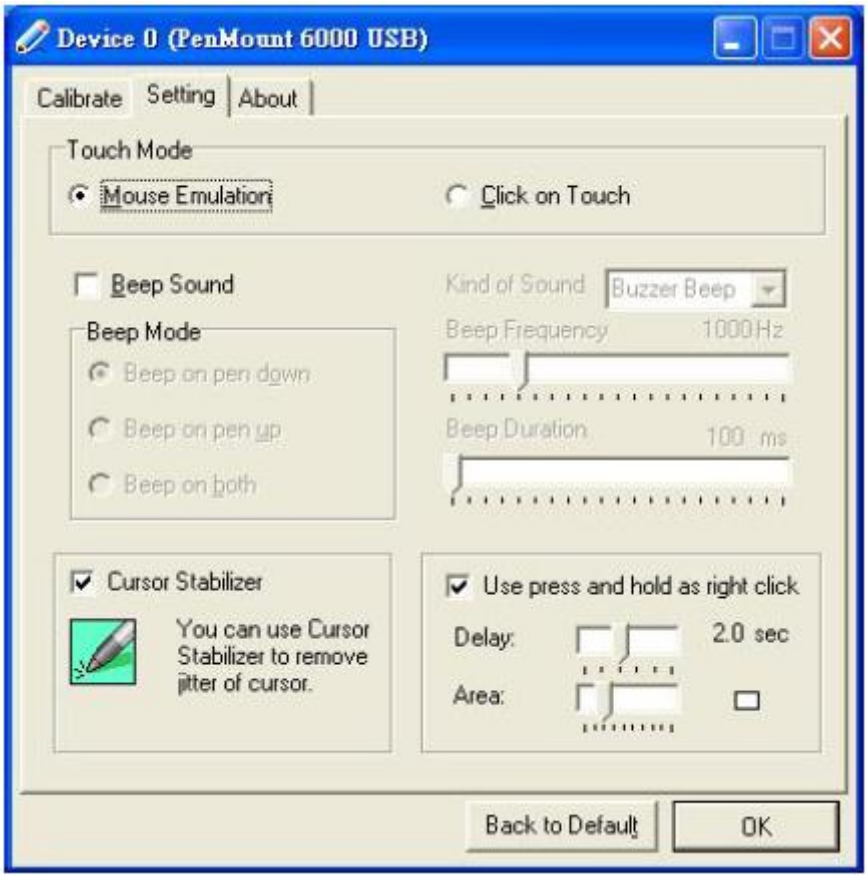
NOTE: Recommend to use a stylus during Advanced Calibration for greater accuracy.



Plot Calibration Data	**Check this function and a touch panel linearity comparison graph appears when you have finished Advanced Calibration. The blue lines show linearity before calibration and black lines show linearity after calibration.**
Turn off EEPROM storage	**The function disable for calibration data to write in Controller. The default setting is Enable**

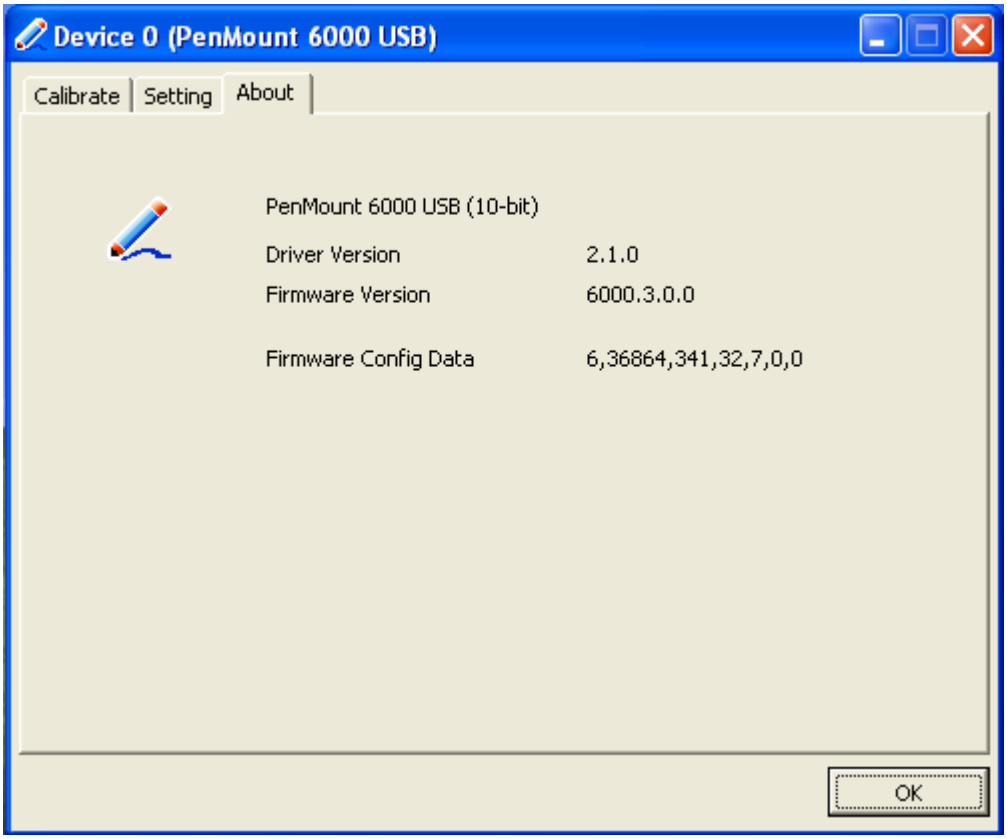
Setting

Touch Mode	**This mode enables and disables the mouse's ability to drag on-screen icons—useful for configuring POS terminals.** **Mouse Emulation – Select this mode and the mouse functions as normal and allows dragging of icons.** **Click on Touch – Select this mode and the mouse only provides a click function, and dragging is disabled**
Beep Sound	**Enable Beep Sound – turns beep function on and off** **Beep on Pen Down – beep occurs when pen comes down** **Beep on Pen Up – beep occurs when pen is lifted up** **Beep on both – beep occurs when comes down and lifted up** **Beep Frequency – modifies sound frequency** **Beep Duration – modifies sound duration**
Cursor Stabilizer	**Enable the function support to prevent cursor shake.**
Use press and hold as right click	**You can set the time out and area for you need**



About

This panel displays information about the PenMount controller and driver version.



Multiple Monitors

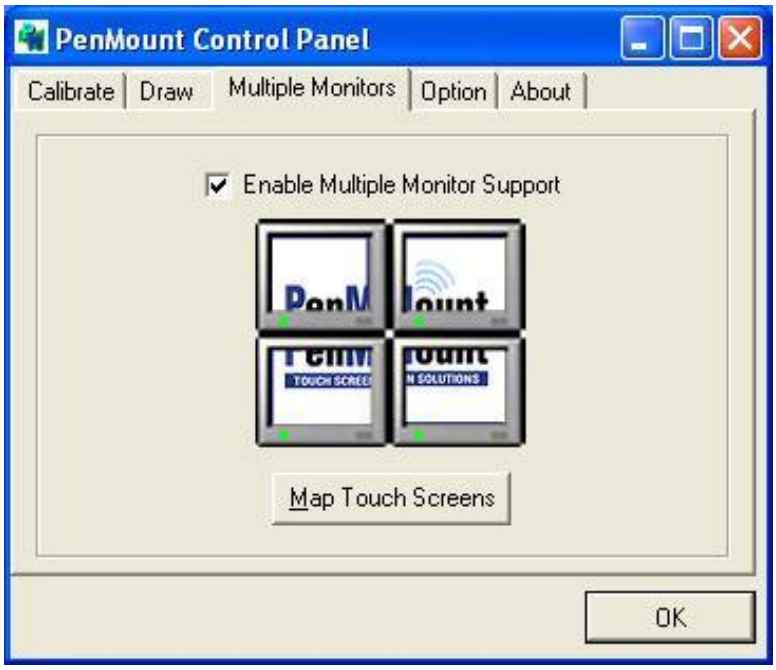
Multiple Monitors support from two to six touch screen displays for one system.
The PenMount drivers for Windows 2000/XP support Multiple Monitors. This function supports from two to six touch screen displays for one system. Each monitor requires its own PenMount touch screen control board, either installed inside the display or in a central unit. The PenMount control boards must be connected to the computer COM ports via the RS-232 interface. Driver installation procedures are the same as for a single monitor. Multiple Monitors support the following modes:

Windows Extends Monitor Function
Matrox DualHead Multi-Screen Function
nVidia nView Function

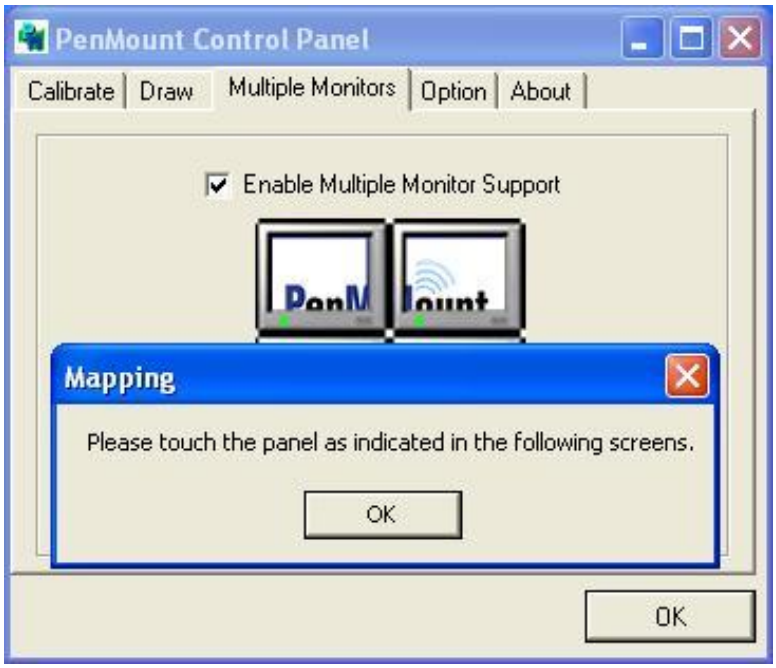
NOTE: The Multiple Monitor function is for use with multiple displays only. Do not use this function if you have only one touch screen display. Please note once you turn on this function the rotating function is disabled.

Enable the multiple display function as follows:

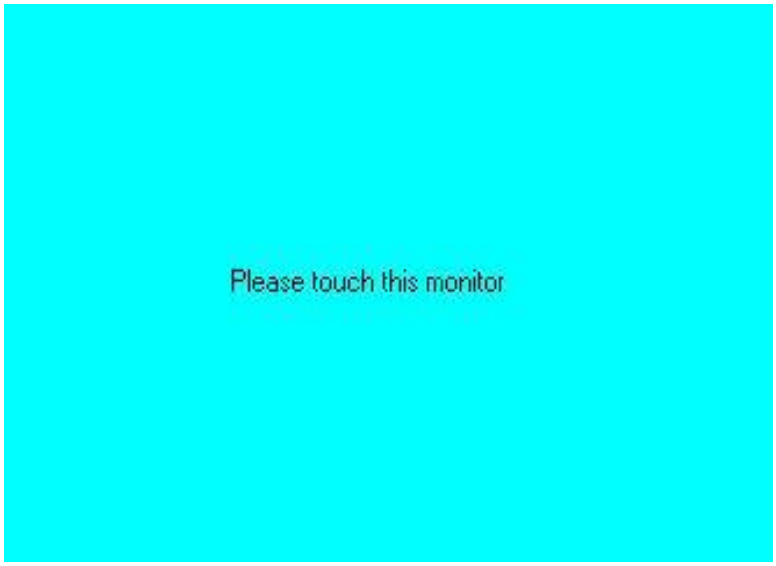
1. Check the **Enable Multiple Monitor Support** box; then click **Map Touch Screens** to assign touch controllers to displays.



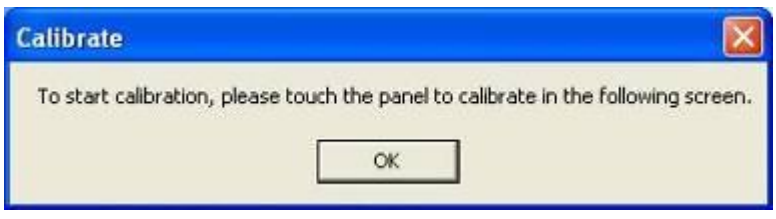
2. When the mapping screen message appears, click OK.



3. Touch each screen as it displays “Please touch this monitor”. Following this sequence and touching each screen is called **mapping the touch screens**.



4. Touching all screens completes the mapping and the desktop reappears on the monitors.
5. Select a display and execute the “Calibration” function. A message to start calibration appears. Click OK.



6. “Touch this screen to start its calibration” appears on one of the screens. Touch the screen.
7. “Touch the red square” messages appear. Touch the red squares in sequence.
8. Continue calibration for each monitor by clicking **Standard Calibration** and touching the red squares.

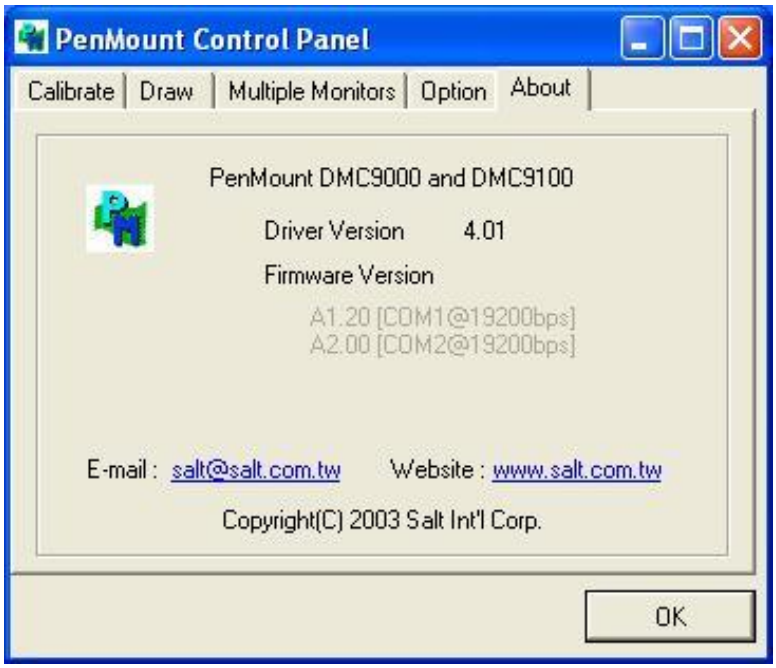
NOTES: 1. If you use a single VGA output for multiple monitors, please do not use the **Multiple Monitor** function. Just follow the regular procedure for calibration on each of your desktop monitors.

2. The Rotating function is disabled if you use the Multiple Monitor function.

3. If you change the resolution of display or screen address, you have to redo **Map Touch Screens,** so the system understands where the displays are.

About

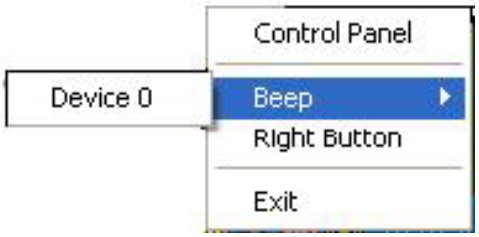
This panel displays information about the PenMount controller and this driver version.



PenMount Monitor Menu Icon

The PenMount monitor icon (PM) appears in the menu bar of Windows 2000/XP system when you turn on PenMount Monitor in PenMount Utilities.

PenMount Monitor has the following function



Control Panel	**Open Control Panel Windows**
Beep	**Setting Beep function for each device**
Right Button	**When you select this function, a mouse icon appears in the right-bottom of the screen. Click this icon to switch between Right and Left Button functions.**
Exit	**Exits the PenMount Monitor function.**

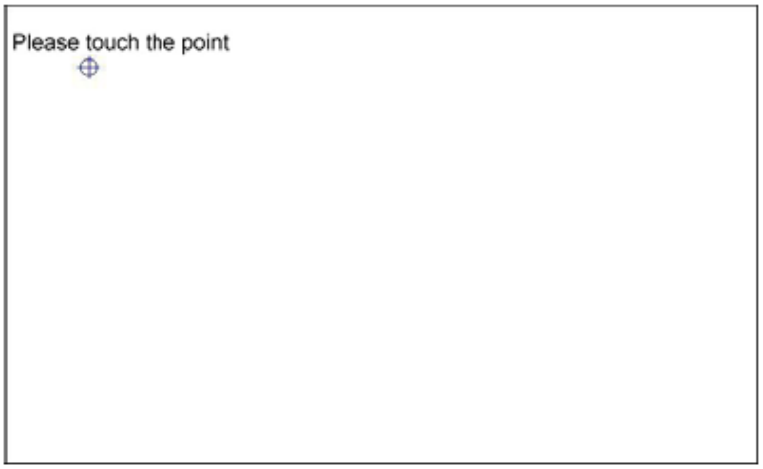
PenMount Rotating Functions

The PenMount driver for Windows 2000/XP supports several display rotating software packages. Windows Me/2000/XP support display rotating software packages such as:

- Portrait's Pivot Screen Rotation Software
- ATI Display Driver Rotate Function
- nVidia Display Driver Rotate Function
- SMI Display Driver Rotate Function
- Intel 845G/GE Display Driver Rotate Function

Configuring the Rotate Function

1. Install the rotation software package.
2. Choose the rotate function (0°, 90°, 180°, 270°) in the 3rd party software. The calibration screen appears automatically. Touch this point and rotation is mapped.



NOTE: The Rotate function is disabled if you use Monitor Mapping